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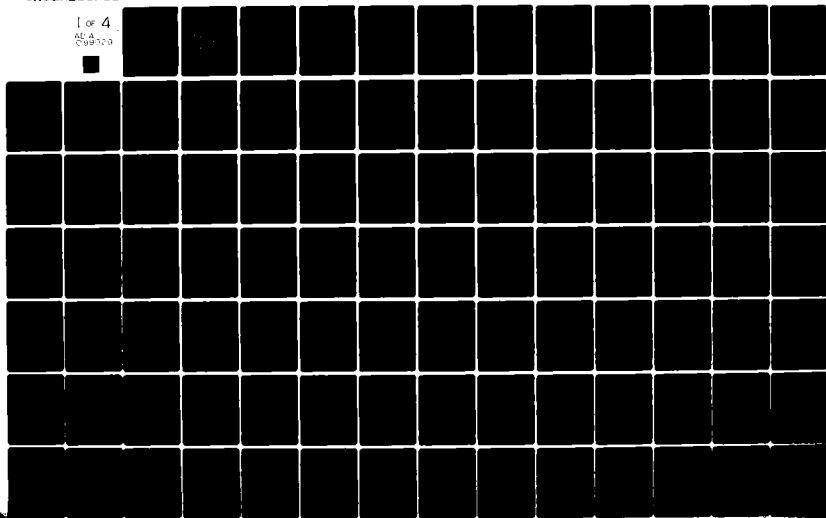
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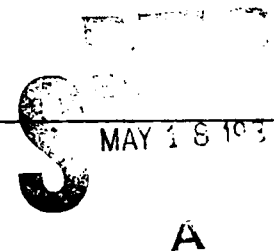
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LEVEL III

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER RDXM-AC-82-3	2. DTIC ACCESSION NUMBER AD-A099029	3. REPORTING ORGANIZATION'S CATALOG NUMBER
4. TITLE (and Subtitle) Department of the Air Force Justification of Estimates for Fiscal Year 1982 submitted to Congress January 1981 Aircraft, Missile and Other Procurement, Air Force	5. TYPE OF REPORT & PERIOD COVERED Final Report FY 82	
7. AUTHOR(s) AF/ACB	6. PERFORMING ORG. REPORT NUMBER None	
9. PERFORMING ORGANIZATION NAME AND ADDRESS HQ USAF/ACB Washington, DC 20330	8. CONTRACT OR GRANT NUMBER(s) In-House	
11. CONTROLLING OFFICE NAME AND ADDRESS HQ USAF/RDXM Washington, DC 20330	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS None	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) NA	12. REPORT DATE January 1981	
	13. NUMBER OF PAGES	
	15. SECURITY CLASS. (of this report) Unclassified	
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE NA	
16. DISTRIBUTION STATEMENT (of this Report) Approved for Public Release; Distribution Unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for Public Release; Distribution Unlimited		
18. SUPPLEMENTARY NOTES See also RDXM-DS-82-1 and RDXM-RD-82-2		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Justification of Estimates Budget Activity Justification Aircraft Procurement Missile Procurement Other Procurement		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This volume contains the annual justification to Congress for the procure- ment of aircraft, missiles and other equipment for the fiscal year 1982.		

  
 MAY 18 1983  
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RDXM-AC-82-3

**DEPARTMENT OF THE  
AIR FORCE  
JUSTIFICATION OF ESTIMATES FOR FISCAL YEAR 1982  
SUBMITTED TO CONGRESS  
JANUARY 1981.**

9 Final rept.



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**AIRCRAFT PROCUREMENT, AIR FORCE  
MISSILE PROCUREMENT, AIR FORCE  
OTHER PROCUREMENT, AIR FORCE**

A

DEPARTMENT OF THE AIR FORCE  
JUSTIFICATION OF ESTIMATES FOR FY 1982 AND FY 1983

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#### AIRCRAFT PROCUREMENT, AIR FORCE

For construction, procurement, and modification of aircraft and equipment, including armor and armament, specialized ground handling equipment and training devices, spare parts, and accessories therefor; the U.S. share of the NATO AWACS program; specialized equipment, expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land without regard to section 9774 of title 10, United States Code, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted hereon prior to the approval of title as required by section 355, Revised Statutes, as amended; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things; \$9,469,900,000 to remain available for obligation until September 30, 1984 (5 U.S.C. 3109; 10 U.S.C. 2271-79; 2353, 2386, 2663, 2672, 2672a, 8012, 8062, 9501-02, 9505, 9531-32, 9741-42; 31 U.S.C. 649c, 718; 50 U.S.C. 451, 453, 455; Department of Defense Appropriation Act, 1981, additional authorizing legislation to be proposed).

AF

## Aircraft Procurement, Air Force

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Program and Financing (in thousands of dollars)		Budget plan (amounts for)				Obligations	
Identification code 57-3010-0-1-051		procurement actions programmed)					
		1980 actual	1981 est.	1982 est.	1980 actual	1981 est.	1982 est.
Program by activities:							
Direct:							
1. Combat aircraft							
2. Airlift aircraft							
3. Other aircraft							
4. Modification of inservice aircraft							
5. Aircraft spares and repair parts							
6. Aircraft support equipment and facilities							
7. Aircraft support equipment and facilities							
Total direct		3,994,950	3,981,100	2,191,300	4,174,712	3,958,185	2,481,049
Reimbursable program (total)		72,200	70,600	.....	1,844	76,641	51,841
Total		43,000	100,100	94,600	40,440	85,280	101,584
		1,555,880	1,831,555	1,966,800	1,327,581	1,636,272	1,914,706
		1,102,100	2,161,345	3,286,200	1,075,686	1,452,666	2,729,164
		1,249,434	1,529,243	1,931,200	1,346,542	1,449,696	1,846,780
		6,017,564	9,674,143	9,469,900	7,965,784	8,659,712	9,135,084
		269,416	286,538	268,538	232,720	312,288	264,930
		8,286,980	9,940,681	9,738,438	8,199,504	8,971,000	9,400,014
Financing:							
Offsetting collections from:							
Federal funds							
Trust funds							
Non-federal sources							
Recovery of prior year obligations, obl plan							
Unobligated balance available, start of year:							
For completion of prior year budget plans							
Available to finance new budget plans							
Reprogramming from or to prior year budget plan							
Unobligated balance transferred to other accounts							
Unobligated balance available, end of year:		129,300	9,400	.....	129,300	9,400	.....
For completion of prior year budget plans		.....	.....	.....	2,090,473	-2,090,473	-3,080,154
Available to finance subsequent year budget plans		.....	.....	.....	.....	-9,400	.....
Unobligated balance lapsing		9,400	.....	.....	.....	.....	.....
Budget authority		86,789	.....	.....	86,789	.....	.....
		7,910,984	9,674,143	9,469,900	7,910,984	9,674,143	9,469,900
Budget authority:							
Appropriation							
Appropriation rescinded							
Transferred to other accounts							
Transferred from other accounts							
Appropriation (adjusted)		7,965,240	9,674,143	9,469,900	7,965,240	9,674,143	9,469,900
Reappropriation		-10,000	.....	.....	-10,000	.....	.....
		-75,076	.....	.....	-75,076	.....	.....
		17,000	.....	.....	17,000	.....	.....
		7,897,164	9,674,143	9,469,900	7,897,164	9,674,143	9,469,900
		13,800	.....	.....	13,800	.....	.....
Relation of obligations to outlays:							
Obligations incurred, net							
Obligated balance, start of year							
Obligated balance, end of year							
Adjustments in expired accounts							
Adjustments in unexpired accounts							
Outlays		7,835,635	8,704,462	8,704,462	7,835,635	8,704,462	9,133,476
		8,819,439	9,887,644	10,328,106	8,819,439	9,887,644	10,328,106
		-9,887,644	-10,328,106	-10,566,562	-9,887,644	-10,328,106	-10,566,562
		-104,989	.....	.....	-104,989	.....	.....
		-15,224	.....	.....	-15,224	.....	.....
		8,647,237	8,264,000	8,895,000	8,647,237	8,264,000	8,895,000

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Aircraft Procurement, Air Force

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Object Classification (in thousands of dollars)

Identification code	57-3010-0-1-001	1980 actual	1981 est.	1982 est.
Direct obligations:				
31.0 Equipment		7,966,764	8,656,712	9,136,084
99.0 Total direct obligations		7,966,764	8,656,712	9,136,084
Reimbursable obligations:				
31.0 Equipment		232,780	312,288	264,930
99.9 Total obligations		8,199,504	8,971,000	9,400,014

AF Aircraft Procurement, Air Force 15 JAN 81

Identification code	57-3010-0-1-051	Program and Financing (in thousands of dollars)		1978 Fiscal year program			
		Budget plan (amounts for procurement actions programmed)		Obligations			
		1980 actual	1981 est.	1982 est.	1980 actual	1981 est.	1982 est.
Program by activities:							
Direct:							
1. Combat aircraft					342,109		
2. Airlift aircraft					1,085		
3. Modification of inservice aircraft					82,836		
4. Aircraft spares and repair parts					48,786		
5. Aircraft support equipment and facilities					50,312		
Total direct					525,109		
Reimbursable program (total)					4,375		
Total					529,484		
10.00							
Financing:							
Offsetting collections from:							
11.00	Adjustment to pay federal fund orders				1,260		
13.00	Adjustment to pay trust fund orders				16,282		
14.00	Adjustment to non-federal sources				-14		
17.00	Recovery of prior year obligations, obl plan				-13,182		
21.40	Unobligated balance available, start of year:						
21.40	For completion of prior year budget plans						
23.40	Reprogramming from or to prior year budget plan	-201,589			-735,419		
23.40	Unobligated balance transferred to other accounts	122,600					
25.00	Unobligated balance lapsing	74,989			122,600		
40.00	Budget authority	-4,000			74,989		
					-4,000		



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Aircraft Procurement, Air Force

AF

Program and Financing (in thousands of dollars)

Identification code 57-3010-0-1-051

		Budget plan (amounts for procurement actions programmed)		Obligations	
		1980 actual	1981 est.	1980 actual	1981 est.
		1982 est.	1982 est.	1982 est.	1982 est.
Program by activities:					
Direct:					
1. Combat aircraft					
2. Airlift aircraft					
3. Other aircraft					
4. Modification of in-service aircraft					
5. Aircraft spares and repair parts					
6. Aircraft support equipment and facilities					
7. Aircraft support equipment and facilities					
Total direct		3,994,950		3,521,702	194,611
Total direct		72,200		40,246	31,841
Reimbursable program (total)		43,000		2,955	1,067
Total		1,555,880		1,099,441	203,457
Total		1,102,100		1,125,234	79,688
Total		1,249,434		1,125,234	49,820
Total direct		8,017,564		6,696,536	664,518
Reimbursable program (total)		269,416		121,785	131,740
Total		8,286,980		6,820,321	796,258
Financing:					
Offsetting collections from:					
Federal funds					
Trust funds					
Non-federal sources					
Unobligated balance available, start of year:					
For completion of prior year budget plans					
Available to finance new budget plans					
Unobligated balance transferred to other accounts					
Unobligated balance available, end of year:					
For completion of prior year budget plans					
Available to finance subsequent year budget plans					
Budget authority		7,920,964		7,920,964	
Budget authority		7,965,240		7,965,240	
Appropriation		-75,076		-75,076	
Transferred to other accounts		17,000		17,000	
Transferred from other accounts					
Appropriation (adjusted)		7,907,164		7,907,164	
Reappropriation		13,800		13,800	



AF		Aircraft Procurement, Air Force		15 JAN 81			
		Program and Financing (in thousands of dollars)		1981 Fiscal year program			
Identification code 57-3010-0-1-051		Budget plan (amounts for procurement actions programmed)		Obligations			
		1980 actual	1981 est.	1982 est.	1980 actual	1981 est.	1982 est.
Program by activities:							
Direct:							
	1. Combat aircraft		3,981,100			3,462,946	499,113
	2. Airlift aircraft		70,800			35,200	20,000
	4. Other aircraft		100,100			81,825	18,257
	5. Modification of inservice aircraft		1,831,555			1,321,581	220,384
	6. Aircraft spares and repair parts		2,161,345			1,222,472	259,366
	7. Aircraft support equipment and facilities		1,529,243			1,247,637	271,580
	Total direct		9,674,143			7,371,861	1,288,600
	Reimbursable program (total)		266,538			179,067	49,136
10.00	Total		9,940,681			7,550,928	1,337,736
Financing:							
Offsetting collections from:							
11.00	Federal funds		-49,800			-49,800	
13.00	Trust funds		-216,538			-216,538	
14.00	Non-federal sources		-200			-200	
21.40	Unobligated balance available, start of year						-2,389,753
24.40	Unobligated balance available, end of year					2,389,753	1,052,016
40.00	Budget authority		9,674,143			9,674,143	



(In Thousands of Dollars)	
Program Requirement - FY 83 ...	\$10,580,300
Program Requirement - FY 82 ...	9,469,900
Program Requirement - FY 81 ...	9,674,143
Program Requirement - FY 80 ...	8,017,564

#### PART I PURPOSE AND SCOPE

This appropriation provides for procurement of aircraft, for modification of in-service aircraft to improve safety, extend service life, improve reliability/supportability, and enhance operational effectiveness, and for the U.S. share of the NATO AWACS program. It also provides for investment spares and repair parts including spare engines, replenishment spares, and other support equipment to include aerospace ground equipment and industrial facilities. In addition, funds are provided for the procurement of flight training simulators. Management of the aircraft program is facilitated by collecting, in a single appropriation, all funds for the prime aircraft weapon system and related specialized ground handling and test equipment.

In the activity justifications which follow, additional details are provided by budget activity. The activities are: combat aircraft, airlift aircraft, trainer aircraft, and other aircraft; modification of in-service aircraft; aircraft spares and repair parts; aircraft support equipment and facilities; and the reimbursable program.

Each of the four aircraft activities consists of the following elements, as applicable, which together constitute the weapon system cost:

a. Flyaway Cost - This element consists of the complete aircraft ready to be flown away from the manufacturer's plant and includes airframe, engines, communications and electronics equipment, photographic equipment, armament, instruments, auxiliary equipment installed in the aircraft, and certain non-recurring costs for tooling and other start-up costs.

b. Peculiar Support Equipment, Training Devices, and Technical Data - This element includes equipment requirements which are applicable to a specific weapon system such as specialized equipment for maintenance, repair and test of a weapon system, subsystem, or its components; special training devices applicable to a specific weapon system such as mobile training units, flight simulators, instrument trainers, and air navigation trainers; and procurement of engineering handbooks, manuals, and other technical data identified with the specific aircraft being procured. Requirements in these categories are established to provide for scheduled delivery of the support equipment in phase with deliveries of the weapon system.

c. Credits from Advance Procurement Prior Year - This element identifies assets applied to a program from advance procurement provided in a prior year for items having a longer lead time than the airframe.

d. Advance Procurement Current Year - This element identifies requirements associated with follow-on aircraft programs which have a longer procurement lead time than the airframe and which therefore must be procured in advance of the airframe.

#### PART II JUSTIFICATION OF FUNDS REQUESTED

The program to be financed with the appropriation for fiscal year 1982 includes \$2,191.3 million to procure additional modern aircraft for the combat forces and \$94.6 million for other aircraft. The fiscal year 1983 program includes \$2,597.2 million for combat aircraft, \$172.9 million for airlift aircraft, and \$468.4 million for other aircraft.

The fiscal year 1982 estimate also provides \$1,966.6 million for modification and modernization of in-service aircraft necessary for safety-of-flight, extension of service life, and to incorporate operational improvements after an aircraft has entered service. The program is designed to maintain the Air Force aircraft inventory at the most modern configuration level at minimum cost. The fiscal year 1982 estimate compares with programs of \$1,555.9 million and \$1,831.6 million for fiscal years 1980 and 1981, respectively. The fiscal year 1983 program is \$2,044.2 million.

Aircraft spares and repair parts are also financed under this appropriation. The spares and repair parts activity includes centrally procured and managed, investment-type spare components and repair parts associated with the procurement of new aircraft, the modification program, peculiar and common aerospace ground equipment programs, and the replenishment spares category, which provides for Air Force operational, maintenance, and overhaul programs. For fiscal year 1982, the request amounts to \$3,286.2 million. The fiscal year 1983 program is \$2,880.1 million.

The aircraft support equipment and facilities activity provides for common aerospace ground equipment, industrial facilities, war consumables, other charges, and the U.S. share of NATO AWACS. The program requirements for fiscal year 1982 are \$1,931.2 million as compared to \$1,529.2 million in fiscal year 1981. The fiscal year 1983 program is \$2,417.5 million.

The requirement for the reimbursable program for fiscal year 1982 is \$266.5 million. This program provides for those aircraft and related items which must be procured to satisfy customer orders.

SUMMARY OF REQUIREMENTS	(In Thousands of Dollars)	
	FY 1980 Actual	FY 1982 Estimate
Combat aircraft-----	\$3,994,950	\$3,981,100
Airlift aircraft-----	72,200	70,800
Other aircraft-----	43,000	100,100
Modification of in-service aircraft-----	1,555,880	1,831,555
Aircraft spares and repair parts-----	1,102,100	2,161,345
Aircraft support equipment and facilities-----	1,249,434	1,529,243
 TOTAL DIRECT PROGRAM-----	 \$8,017,564	 \$9,674,143
Reimbursable program-----	269,416	266,538
 TOTAL PROGRAM REQUIREMENTS (CURRENT)-----	 \$8,286,980	 \$9,940,681
Less: Portion of program to be obligated in subsequent fiscal years-----	1,466,659	2,389,753
Plus: Obligations incurred against prior year program funds-----	1,379,183	1,420,072
 TOTAL OBLIGATIONS-----	 \$8,199,504	 \$8,971,000
		\$9,400,014

SUMMARY OF PROGRAM REQUIREMENTS	(In Thousands of Dollars) FY 1983 Estimate
Combat aircraft-----	\$2,597,200
Airlift aircraft-----	172,900
Other aircraft-----	468,400
Modification of in-service aircraft-----	2,044,200
Aircraft spares and repair parts-----	2,880,100
Aircraft support equipment and facilities-----	2,417,500
 TOTAL DIRECT PROGRAM-----	 \$10,580,300

(In Thousands of Dollars)

Program Requirement - FY 83 ...	\$2,597,200
Program Requirement - FY 82 ...	2,191,300
Program Requirement - FY 81 ...	3,981,100
Program Requirement - FY 80 ...	3,994,950

#### ACTIVITY: Combat Aircraft

##### PART I PURPOSE AND SCOPE

This activity provides for the procurement of new aircraft, associated flight simulation devices, and other peculiar training and support equipment to continue modernization of U.S. combat forces and improve the efficiency of training programs.

Combat aircraft are required to attain and maintain air superiority, interdict enemy supply lines, provide reconnaissance of enemy forces, and furnish close air support to ground forces. The aircraft can be used to counter a variety of threats and offer options of response ranging from the use of diversified conventional weapons through, in the case of U.S. forces, a variety of nuclear weapons.

The FY 1982 and FY 1983 programs include funds for the procurement of F-15, F-16 (Air Combat fighter), and E-3A (AWACS) aircraft. The programs also include funds for procurement of flight simulators for F-16 aircraft.

##### PART II JUSTIFICATION OF FUNDS REQUESTED

The total FY 1982 and FY 1983 fund requirements by FY, for procurement of combat aircraft, related support items, and advance procurement funding in support of the following year's program are: FY 1982 - \$2,191.3 million; and FY 1983 - \$2,597.2 million. Details are as follows:

#### A-10 (FY 1982 - \$9.8 million):

The A-10 attack aircraft is specifically designed for the close air support role. It is a single-seat, twin turbofan powered, fixed wing, subsonic aircraft capable of carrying a versatile ordnance load and is armed with one 30MM rapid fire gun system. The A-10 meets the requirement to provide close supporting fire, armed escort, and armed reconnaissance in battle areas involving anti-tank and anti-mechanized vehicle operations in close proximity to friendly ground forces. The firepower, survivability, and long-loiter capability of the A-10 provide an improved close air support capability. The A-10 initial operational capability was achieved in Oct 1977, three months ahead of schedule. The FY 1982 request is for procurement of ground support equipment; no aircraft procurement is requested for FYs 1982 and 1983.



F-15A/B/C/D (FY 1982 - 30 aircraft, \$837.0 million; FY 1983 - 18 aircraft, \$530.1 million):

The F-15 is a twin engine (P&W F100), single crew (B/D is two-crew), fixed swept wing, advanced tactical fighter designed for the counter air mission. It is characterized by high thrust-to-weight and low wing loading for maximum acceleration and maneuverability. The main purpose of the F-15 is to provide the Air Force with an aircraft which can defeat Soviet-built fighters of the 1980s. It has the maneuverability, armament, and fire control needed to surpass the capabilities expected from Soviet aircraft in that period. The F-15 has replaced the F-4 as the primary air superiority aircraft. The basic take-off thrust-to-weight ratio of the F-15 is greater than one-to-one and will permit the F-15 to out-climb, out-accelerate and out-turn any known or projected threat during this time period.

F-16 (Air Combat Fighter) FY 1982 - 96 aircraft, \$1,344.5 million; FY 1983 - 96 aircraft, \$1,522.9 million):

The F-16 is a new multi-purpose fighter incorporating advanced technology features proven in the Lightweight Fighter (LWF) prototype program. The goal is to deploy a fighter which can perform an acceptable spectrum of tactical air warfare tasks at minimum costs. The design characteristics of the F-16 are such as to permit high sortie rates with rapid turn around; minimum manpower/logistics burden; and exceptional air combat maneuvering performance, coupled with a potent air-to-ground weapons delivery capability. The F-16 will also enable modernization and standardization of equipment among those allied countries which choose to replace their aging tactical fighter forces with F-16s.

E-3A (AWACS) (FY 1982 - 0 aircraft, \$0; FY 1983 - 4 aircraft, \$544.2):

The E-3 (AWACS) provides an airborne surveillance, command, control, and communications system for use in both tactical and strategic defensive operations. The airborne platform, and modified Boeing 707 aircraft, is common for both types of operation with interchangeability for the two missions being easily accommodated by changing the control processor software. The E-3A (AWACS) can operate as a self-contained, survivable force management center, or an adjunct to an established ground control net. Its distinguishing technical feature is the capability for long range detection and tracking of airborne objects operating at high or low altitudes over both land and water for extended periods.

(In Thousands of Dollars)	
Program Requirement - FY 83 ...	\$172,900
Program Requirement - FY 82 ...	0
Program Requirement - FY 81 ...	70,800
Program Requirement - FY 80 ...	72,200

ACTIVITY: Airlift Aircraft

PART I PURPOSE AND SCOPE

This activity provides for the procurement of new aircraft, associated flight simulators, and support items to continue improvement of the U.S. airlift forces.

PART II JUSTIFICATION OF FUNDS REQUESTED

No funds are requested for FY 1982. The FY 1983 request is for the initiation of C-X procurement. The C-X will be capable of carrying outsized cargo, such as heavy mechanized Army equipment, over intercontinental distances, as well as being capable of moving the equipment within the theater of operation. This is a major initiative to improve rapid deployment capability. Several designs are being considered during full scale engineering development which began in FY 1981.

(In Thousands of Dollars)

Program Requirement - FY 83 ...	\$468,400
Program Requirement - FY 82 ...	94,600
Program Requirement - FY 81 ...	100,100
Program Requirement - FY 80 ...	43,000

#### ACTIVITY: Other Aircraft

##### PART I PURPOSE AND SCOPE

This activity provides for the procurement of TR-1, E-4B, and Airborne Launch Control Aircraft in FYs 1982 and 1983.

##### PART II JUSTIFICATION OF FUNDS REQUESTED

TR-1 (FY 1982 - 4 aircraft, \$94.6 million; FY 1983 - 4 aircraft, \$105.9 million):

The TR-1 is a variant of the highly capable U-2K aircraft currently in the strategic reconnaissance inventory .... the only U.S. aircraft capable of long loiter, standoff surveillance from altitudes above 60,000 feet with an electronic sensor horizon of over 300 NM. Equipped with the latest electronic sensors being developed in other programs, the TR-1 will provide U.S. and Allied ground and air forces an effective battlefield surveillance system into the 1990s.

E-4B (FY 1983 - 1 aircraft, \$286.0 million):

The E-4 Advanced Airborne Command Post is a survivable command and control facility designed to support the National Command Authority and the Commander in Chief, Strategic Air Command during all phases of a nuclear conflict. Extensive communications equipment is provided to support the requirement to be capable of assessing the situation, providing information for decision making, disseminating direction to nuclear forces, and accomplishing for monitoring and management.

Airborne Launch Control Aircraft (FY 1983 - \$76.5 million):

The M-X Airborne Launch Control Center (ALCC) is the primary means of M-X command and control during trans and post attack phases of a nuclear conflict. The ALCC will be a strategic aircraft, designed for survivability and endurance and capable of carrying the necessary command, control and communications equipment. One ALCC is to be continuously airborne with a backup on strip alert. The aircraft will be able to perform its command and control functions for fourteen days from austere airfields. The M-X helicopter will carry personnel and equipment to remote, widely dispersed M-X missile sites.

(In Thousands of Dollars)	
Program Requirement - FY 83 ...	\$2,044,200
Program Requirement - FY 82 ...	1,966,600
Program Requirement - FY 81 ...	1,831,555
Program Requirement - FY 80 ...	1,555,880

ACTIVITY: Modification of In-Service Aircraft

PART I PURPOSE AND SCOPE

This budget activity provides for modification and modernization of in-service aircraft, training devices and support equipment necessary for safety, extension of service life, and to incorporate operational improvements after an aircraft has entered service. The program is designed to maintain the Air Force aircraft inventory at the most modern configuration level at the minimum cost.

PART II JUSTIFICATION OF FUNDS REQUESTED

Modifications are necessary to enable the strategic offense, defense, tactical, and support forces to maintain superiority over hostile forces, to extend the active service life of aircraft, and to keep abreast of changing mission requirements. To ensure maximum safety for the aircraft and crews and to enhance capabilities of aircraft in a combat environment, priority modifications are necessary. Modifications are closely examined and priorities established so that only the most essential are accomplished with the funds available.

The FY 1982 program, to a large extent, consists of follow-on requirements for previously initiated modifications. Particularly significant, is the requirement to provide long range cruise missile carriage for the B-52G and the companion requirement to modernize the offensive avionics system on the B-52G/H aircraft. Funds are also included in FY 1982 to procure long-lead hardware to reengine KC-135 aircraft with new fuel efficient, high by-pass turbo fan engines. The FY 1982 funds are required to preserve our production option pending completion of the first aircraft now underway. Other significant efforts impacting the program total include:

- (1) Increasing the strategic airlift capability.
- (2) Updating the penetration and electronic defense capabilities of various weapon systems to improve survivability in a hostile environment.

- (3) Upgrading C3 equipment on the National Emergency Airborne Command Post to the advanced configuration.
- (4) Provision of tactical support jamming capability.
- (5) Improvement in Peacetime Material Readiness through replacement of unreliable hardware with new state of the art equipment, thus increasing maintainability/reliability and decreasing support costs.

Aircraft modification kits are procured on a phased basis, lead time away from installation, which is scheduled concurrent with normal maintenance programs to the maximum extent possible. Complex modifications are installed at Air Force depots or contractor facilities, concurrent with programmed depot maintenance. Where the installation tasks are less complex or require a relatively small number of man-hours, they are accomplished in the field by assigned personnel or specialized teams dispatched from the depot or provided by contractors.

B-52 (FY 82 - \$511.6 million; FY 83 - \$505.9 million). The FY 1982 program includes: follow-on modifications for Offensive Avionics modernization, long range Air Launched Cruise Missile carriage, and Observable Difference System, in the amount of \$334.7 million; Tail Warning capability in the amount of \$16.1 million; Electronic Countermeasure Transmitter update in the amount of \$3.8 million; Electronic Countermeasure Power Management in the amount of \$9.8 million; improved reliability of the defensive fire control system in the amount of \$19.3 million; and \$14.8 million for various reliability/maintainability improvements. In addition, the program includes \$12.7 million to initiate a modification to provide a new monitor and control system for nuclear weapons; \$17.8 million to initiate avionics improvements on the B-52D; and \$82.6 million to provide nuclear hardening.

The FY 1983 program will continue programs previously started, and initiate new programs to provide reliability/maintainability improvements for the B-52D primary cockpit procedures trainer.

FB-111 (FY 82 - \$2.7 million; FY 83 - \$3.7 million). The FY 1982 program initiates a modification to provide a new nuclear weapons monitoring and control device.

The FY 1983 program completes this effort.

F-106 (FY 82 - \$37.0 million; FY 83 - \$43.6 million). The FY 1982 program provides \$15.0 million to initiate a program to upgrade the radar; \$4.7 million to replace the existing Instrument Landing System; and \$3.9 million of other new reliability improvements. The FY 1982 program also provides \$11.3 million for continuation of the reliability improvement to the X Band Transistor Assembly and \$2.1 million for continuing other reliability improvements.

The FY 1983 program continues efforts started in previous fiscal years and initiates a reliability improvement to the primary mission trainer.

A-7 (FY 82 - \$25.7 million; FY 83 - \$16.5 million). The FY 1982 program includes \$11.3 million for follow-on procurement of a new digital scan converter and \$8.6 million to continue implementation of various improvements to the TF-41 engine. In addition, the program includes \$5.8 million to initiate new reliability modifications to the TF-41 engine.

The FY 1983 program continues modifications previously started.

A-10 (FY 82 - \$51.9 million; FY 83 - \$76.2 million). The FY 1982 program includes \$23.7 million to modify operational aircraft consistent with reliability changes to be incorporated into aircraft on the production line, and \$28.2 million for an Inertial Navigation System (INS) for operational aircraft as a follow-on to FY 1981.

The FY 1983 program provides \$18.6 million for continuation of the aircraft update efforts; \$15.8 million for initiation of the Turbine Engine Monitoring System; \$12.4 million for initiation of the SEEK TALK Jam Resistant Radio program; and \$29.4 million to continue the INS procurement.

F/RF-4 (FY 82 - \$101.5 million; FY 83 - \$108.0 million). In FY 1982, funds are requested for follow-on costs of previous modifications as follows: \$1.4 million for the Chaff and Flare Dispenser capability; \$25.5 million to upgrade the radar warning receiver on the F-4E; \$5 million for an altitude line improvement to the APQ-120 radar; \$11.2 million to replace the inertial navigation system and weapons delivery system on the F-4G Wild Weasel; and \$8.0 million for various safety and reliability improvements. In addition, \$11.8 million is included for initiation of an improved secure voice capability; \$9.7 million to procure additional AAD-5 Infrared Reconnaissance Sensors; \$7.5 million to provide GBU-15 weapons carriage on Pave Tack equipped aircraft; \$24.5 million for new safety modifications; and \$1.4 million for various simulator improvements.

The FY 1983 program continues previously initiated modifications.

F-5 (FY 82 - \$3.8 million; FY 83 - \$2.7 million). The FY 1982 program provides \$3.8 million for safety and reliability improvements.

The FY 1983 program continues improvements begun in previous years.

F-15 (FY 82 - \$45.3 million; FY 83 - \$81.7 million). The FY 1982 program is comprised of \$26.3 million to modify operational aircraft to standard configuration compatible with changes being incorporated into aircraft on the production line; continuation of the improved ALR-56 countermeasures capability in the amount of \$2.9 million; \$1.1 million to continue procurement of a cockpit TV sensor/airborne video tape recorder capability, and \$15.0 million is included to continue a modification to improve reliability of the UHF radio and TACAN and provide a VHF radio and secure voice capability.

The FY 1983 program consists of continuation of the aircraft update effort, modifications previously initiated and initiation of an anti-satellite defense capability.

F-16 (FY 82 - \$60.0 million; FY 83 - \$69.1 million). The FY 1982 program is to continue the update of operational aircraft to a standard configuration compatible with changes being incorporated into aircraft on the production line.

The FY 1983 program continues the update of operational aircraft and initiates the SEEK TALK anti-jam communications capability.

F-111 (FY 82 - \$33.8 million; FY 83 - \$69.9 million). The FY 1982 program includes: \$3.0 million to continue a secure voice capability; \$23.3 million for correction of various mission limiting engine and avionics deficiencies previously begun; and an additional \$7.5 million to initiate new reliability improvements.

Continuation of previously initiated modifications is provided for in the FY 1983 program plus initiation of various reliability and safety modifications on the engine and airframe in the amount of \$6.8 million.

EF-111 (FY 82 - \$260.8 million; FY 83 - \$198.9 million). The FY 82 program continues procurement of a modification to incorporate an electronic countermeasure subsystem, the ALQ-99, into 42 F-111A aircraft. The EF-111 will provide the capability to accomplish all tactical jamming support missions, i.e., barrier/standoff, close air support and penetration/escort jamming. The F-111 operational performance capabilities will be preserved by installing the ALQ-99 in the weapon bay area and other subsystems will be installed internally. The EF-111A is the replacement for the EB-66 which was phased out at the end of FY 1974 due to age and obsolescence of the jamming equipment.

The FY 1983 program completes the production buy program. The last modified aircraft delivers in FY 1986.

TR-1 (FY 83 - \$7.3 million). The FY 1983 program initiates modifications to enhance the capability of the TR-1 reconnaissance system.

C-5A (FY 82 - \$214.6 million; FY 83 - \$207.2 million). The FY 1982 program continues the production phase of the wing replacement modification necessary to achieve an increased 30,000 flying hour service life in the amount of \$192.5 million; \$14.9 million to continue procurement of a replacement of the unreliable weather radar with a highly reliable commercial weather radar; \$3.3 million to continue procurement of a fuel savings advisory system to allow more efficient use of fuel; \$2.9 million for various reliability and safety improvements; and \$1.0 million to initiate a program to provide secure voice capability.

The FY 1983 program continues the wing replacement modification, and other previously initiated modifications.

C-141 (FY 82 - \$52.9 million; FY 83 - \$35.0 million). The FY 1982 program provides \$8.7 million to continue the digital flight data recorder; \$7.9 million for various reliability and safety modifications; \$21.5 million to continue procurement of a fuel savings advisory system to allow more efficient use of fuel; \$11.1 million to continue upgrading the primary crew trainer; and \$3.7 million to initiate a secure voice capability.

The FY 1983 program continues modifications initiated in previous fiscal years and provides \$12.1 million to procure a deployable crisis management capability.

T-38 (FY 82 - \$8.3 million; FY 83 - \$4.5 million). In FY 1982, funds are requested for modifications as follows: \$5.3 million for a safety improvement to the ejection seat; \$1.4 million for a fuselage dorsal longeron beefup; and \$1.6 million for other structural and reliability improvements.

The FY 1983 program continues modifications initiated in previous fiscal years.

C-130 (FY 82 - \$94.9 million; FY 83 - \$91.2 million). The FY 1982 program continues procurement of a wing modification to extend the service life in the amount of \$67.5 million and \$9.6 million for various safety improvements; provides \$4.6 million for initiation of secure voice capability; \$1.7 million for continuation of Chaff/Flare countermeasures dispensers; initiates a new modification to conserve fuel by adding afterbody strakes to reduce drag in the amount of \$4.4 million; and initiates new safety and reliability improvements in the amount of \$7.1 million.

The FY 1983 program continues the wing modification and other efforts begun in previous fiscal years.

C-135 (FY 82 - \$143.3 million; FY 83 - \$132.2 million). The FY 1982 program includes: \$34.4 million for extension of aircraft service life by reskinning the lower wing surface; a modification to provide a VHF AM/FM radio capability for \$3.8 million, a fuel savings advisory system in the amount of \$34.9 million, various reliability and safety improvements in the amount of \$8.6 million and \$30.0 million for long-lead hardware to preserve the KC-135 re-engine option pending completion of the first aircraft. In addition, for the specialized EC-135 command and control aircraft, the FY 1982 program provides \$11.9 million to initiate a program to provide 100 kilowatt transmitters to enhance signal output; \$10.4 million for increased airborne retargeting capability; \$7.8 million for electromagnetic pulse hardening; and \$1.5 million for completion of a secure voice capability.

The FY 1983 program continues funding of modifications initiated in previous fiscal years and also initiates improvements to the Minimum Essential Emergency Communication Network (MEECN) in the EC-135's in the amount of \$1.8 million.

E-3A (FY 82 - \$17.3 million; FY 83 - \$92.1 million). The FY 1982 program includes \$10.0 million to update operational aircraft to a standard configuration compatible with changes being incorporated into aircraft on the production line; \$5.8 million to initiate a communication enhancement including the Joint Tactical Distribution System; and \$1.5 million to initiate Electronic Counter-Counter measures improvements.

The FY 1983 program continues programs begun in prior fiscal years.

E-4A (FY 82 - \$112.4 million; FY 83 - \$12.6 million). The FY 1982 request is to reconfigure the last of the three Interim Airborne Command Post aircraft to the E-4B Advanced Airborne Command Post configuration, \$111.6 million; and to provide miscellaneous reliability improvements in the amount of \$1.8 million.

The FY 1983 program provides various communications improvements and other miscellaneous improvements.



HH-53 (FY 82 - \$7.1 million; FY 83 - \$28.6 million). In FY 82, continuation of safety modification for crash worthy fuel systems requires \$4.0 million and various other safety and reliability improvements require \$3.1 million.

In FY 83, the crash worthy fuel system and various other improvements begun in prior years require continuing support.

OV-10 (FY 83 - \$3.5 million). The FY 1983 program provides \$3.5 million for initiation of the SEEK TALK anti-jam communications program.

Other Aircraft (FY 82 - \$42.9 million; FY 83 - \$63.9 million). In FY 1982, funds are required for follow-on costs of previously initiated modifications as follows: \$12.9 million for a modification to the Radar Warning Receiver Signal Processor (OM442A/ ALR46(V)) to provide the capability to identify and locate the latest known enemy threats; \$12.8 million to replace HF and VHF AM/FM radios with highly reliable state-of-the-art radios; \$3.0 million for initiation of a program to replace low and high altitude radar altimeters with a new solid state combined altitude radar altimeter; and \$14.2 million for various modifications on a variety of aircraft.

The FY 1983 program continues the modifications initiated in FY 1982 and prior.

Classified Projects (FY 82 - \$51.0 million; FY 83 - \$72.8 million). These funds are required to provide for the modification of various aircraft and airborne systems used in classified missions, which because of their sensitivity, require the application of special management and security safeguards.

Civil Reserve Air Fleet (CRAF) (FY 82 - \$87.8 million; FY 83 - \$108.9 million). The FY 1982 request of \$87.8 million is to incorporate cargo convertibility features into six production line wide-bodied passenger carrying aircraft being procured by United States commercial air carriers to enhance the strategic airlift capability without increasing the Air Force aircraft inventory.

The FY 1983 request is for seven additional CRAF aircraft. This will enhance the strategic airlift capabilities to satisfy the time-phased deployment requirements of a major contingency.

The table below summarizes fund requirements for Fiscal Years 1981, 1982 and 1983 by aircraft/category:

(In Millions of Dollars)

<u>Aircraft/Category</u>	<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>
B-52	\$485.0	\$511.6	\$505.9
FB-111	-	2.7	3.7
F-106	7.7	37.0	43.6
A-7	11.3	25.7	16.5
A-10	39.8	51.9	76.2
F/RF-4	72.4	101.5	108.0
F-5	-	3.8	2.7
F-15	83.4	45.3	81.7
F-16	40.0	60.0	69.1
F-111	70.8	33.8	69.9
EF-111	236.3	260.8	198.9
TR-1	-	-	7.3
C-5	181.7	214.6	207.2
C-141	43.3	52.9	35.0
T-38	5.5	8.3	4.5
T-39	8.3	-	-
C-130	23.9	94.9	91.2
C-135	176.4	143.3	132.2
E-3A	10.0	17.3	92.1
E-4A	140.0	112.4	12.6
H-3	-	-	8.2
HH-53	2.4	7.1	28.6
OV-10	1.7	-	3.5
Other Aircraft	51.4	42.9	63.9
Classified Projects	100.6	51.0	72.8
CRAF	39.8	87.8	108.9
TOTAL	\$1,831.6	\$1,966.6	\$2,044.2

STATUS OF AIRCRAFT MODIFICATION PROGRAMS

FY 1979 Modification of Aircraft  
Programs as of 30 Oct 80  
(\$ in millions)

<u>Program</u>	<u>Appropriated</u>	<u>Reprogrammings</u> 1/	<u>Total Program Value</u>	<u>Total Obligations</u>	<u>Total Expenditures</u>
Budget Activity No. 5 P-1 No. 19-41	\$947.8	\$-2.5	\$945.3	\$884.1	\$490.9

1/ Includes \$-4.1 million of Congressionally approved reprogrammings out of this account and \$+1.6 million of below threshold reprogrammings by the Air Force into this account.

STATUS OF AIRCRAFT MODIFICATION PROGRAMS

FY 1980 Modification of Aircraft  
Programs as of 30 Oct 80  
(\$ in million)

<u>Program</u>	<u>Appropriated 1/</u>	<u>Reprogrammings 2/</u>	<u>Total Program Value</u>	<u>Total Obligations</u>	<u>Total Expenditures</u>
Budget Activity No. 5					
P-1 No. 14-35	\$1,577.7	\$-21.8	\$1,555.9	\$1,132.2	\$126.5

1/ FY 80 Budget plus Supplemental

2/ Includes \$-31.9 million of Congressionally approved reprogrammings  
out of this account and \$+10.1 million of below threshold reprogrammings  
by the Air Force into this account.

STATUS OF AIRCRAFT MODIFICATION PROGRAMS

FY 1981 Modification of Aircraft  
Programs as of 30 Oct 80  
(\$ in millions)

<u>Program</u>	<u>Appropriated</u> 1/	<u>Reprogrammings</u>	<u>Total Program Value</u>	<u>Total Obligations</u>	<u>Total Expenditures</u>
Budget Activity No. 5 P-1 No. 16-39	\$1,816.6	None	\$1,816.6	\$1.4	None

1/ FY 1981 President's Budget as amended

(In Thousands of Dollars)

Program Requirement - FY 83 ...	\$2,880,100
Program Requirement - FY 82 ...	3,286,200
Program Requirement - FY 81 ...	2,151,345
Program Requirement - FY 80 ...	1,102,100

# ACTIVITY: Aircraft Spares and Repair Parts

## PART I PURPOSE AND SCOPE

This activity provides funds for centrally procured and managed, investment type spare components and repair parts for the aircraft being procured, the aircraft in the inventory, the modification and modernization program, related aircraft support equipment, and spares for Other Production programs, such as ECM pods. Investment type items are defined as reparable assemblies, spares and repair parts which are centrally managed, and most items have a unit cost of \$1,000 or more.

## PART II JUSTIFICATION OF FUNDS REQUESTED

Provision is made for the procurement of investment initial spares, for which the funds must be programmed in FYs 1982 and 1983 to provide support for new production aircraft, common support equipment, the aircraft modification program, and Other Production programs. Replenishment, or follow-on, spares and repair parts funds must also be committed and obligated for those items required for the 1983 and 1984 flying hour programs (procurement lead time away - that is, funds are programmed one to two years ahead of the flying hour program, depending upon component production leadtime).

The following table compares fiscal years in the various spare and repair parts categories:

	(In Millions of Dollars)			
	FY 1980	FY 1981	FY 1982	FY 1983
Initial Weapon System Spares	\$294.3	\$333.4	\$396.0	\$205.0
Initial Modification Spares	45.0	96.2	110.2	192.2
Initial Common AGE Spares	11.7	12.9	17.1	16.5
Initial Other Production Spares	-	5.1	18.1	22.6
Total Initial Spares	\$351.0	447.6	\$541.4	\$436.3
Replenishment Spares	751.1	1713.7	2744.8	2443.8
Total Spares and Repair Parts	\$1102.1	\$2161.3	\$3286.2	\$2880.1

Included in this combined initial/replenishment spares program are spare engines and those recoverable/replacement type items which are normally repaired and returned to stock. The basic determinant of the spares level required for an item is the time it will operate before it must be removed and repaired. This capability is Mean Time Between Demand (MTBD) and is expressed in operating hours. The MTBD of an item is applied to the operating program of the weapon system to determine how many reparables will be generated during the period. From this, required pipeline quantities, base stock, depot stocks, and attrition replacements are determined. Maximum consideration is given to improved management actions, faster repair, air transportation, and selective management of high cost items. The buy requirements are intensively reviewed semiannually by an Air Force management review team.

Initial spares include spare engines and those new recoverable/replacement type items required for initial support of aircraft being procured and aircraft modification programs. The FY 1982 program includes spares for the A-10, F-15, F-16, and TR-1 aircraft. The FY 1982 replenishment spares program supports peacetime operating stock requirements, includes War Reserve Materiel (WRM) spares for new aircraft being added to the inventory, and reduces WRM deficits caused by deferral of such procurement in prior years. A detailed discussion of War Reserve computation assumptions and methodology follows:

#### WAR RESERVE - SECONDARY ITEMS

(\$ Millions)

<u>Aircraft Replenishment Spares</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
Requirement	\$3958.1	\$4294.3	\$4300.1
Applicable Assets Applied	1974.9	2140.0	2487.3
Funding Requested	87.1	522.7	729.7

Planning Assumptions: The planning assumptions used for computing aircraft replenishment spares War Reserve Materiel (WRM) requirements are contained in the DOD Consolidated Guidance (CG). The CG provides guidance regarding the length of the wartime scenarios; the gross force size (number of aircraft wings); the number of days of WRM to be funded; and other general guidance relative to the logistics area for which WRM requirements are computed.

Computation Methodology: WRM requirements are additive to peacetime needs, and are computed by a mechanized system for those items that are required for wartime usage, safety, and deemed mission essential. The WRM requirements consist of two segments as follows:

1. Prepositioned segment consists of:

a. War Readiness Spares Kits (WRSK) are air transportable packages of spares that will support specific units tasked to be deployed during the first 30 days of a war or contingency until resupply can be established. The basic configuration of a WRSK is determined by the maintenance concept to be used, i.e., Remove and Replace (RR) an item as opposed to Remove, Repair, and Replace (RRR) the item. The WRSK are configured to include both the RR and RRR maintenance concepts. Since base level repair shops may not be available at the deployed site, support for the first few days is based on RR and the balance of the support is based on RRR. The using major command and the Air Force Logistics Command (AFLC) determine those essential items to be included in the WRSK, which is only a small portion of the total number of items used on a day-to-day basis in peacetime. The quantity of items to be included in the WRSK are computed using factors such as item failure rates, number of items per aircraft, the flying hour program to be supported, base repair time, item pipeline time, and available assets.

b. Base Level Self-Sufficiency Spares (BLSS) are spares designed to augment existing peacetime assets to support the initial increased wartime activity for specific units that will fight the war in place. BLSS requirements consider the same factors as those used in the WRSK computation. These requirements reflect the number of items required to support the base repair cycle, fill the pipeline to the depot for those items the base cannot repair, and provide a safety level to cover random demands. Those units which are authorized a WRSK are not authorized a BLSS.

2. Other War Reserve Materiel (OWRM) are spares required to sustain the force at wartime levels after the prepositioned assets are used and until the production base can be expanded to satisfy wartime consumption. OWRM requirements are determined based on the same factors used for WRSK/BLSS computations, which are applied to the total wartime flying hour program. The resulting OWRM requirements are then reduced by assets available from production, peacetime levels and WRSK and BLSS levels. OWRM assets are stored in the AFLC depots.

Changes in requirements and funding levels are caused by many factors such as new aircraft activations; changes in item failure rates; increased wartime flying hour programs; modification of existing aircraft to increase wartime capability and increased cost of items (inflation). The increase in the spares WRM requirements are driven primarily by new aircraft activations, increased wartime flying hour programs (sortie surge for tactical fighters) and inflation. The funding level for WRM spares is impacted by fiscal constraints. Due to limited resources, Air Force funding priority supports peacetime needs first and then WRM requirements. Priority support of peacetime needs is essential to ensure the force is trained and the aircraft are maintained in an operational condition in order to meet wartime taskings. The FY 1982 war reserve funding level of \$729.7 million is a considerable improvement over the \$522.7 million contained in the FY 1981 Budget, reflecting a definite commitment on the part of the Air Force to improve wartime readiness.



Aircraft initial spares requirements by weapon system and fiscal year are listed below:

\*AIRCRAFT INITIAL SPARES (DOLLARS IN MILLIONS)

	<u>FY 1982</u>	<u>FY 1983</u>
TR-1 Nr. of Acft Procured	\$ 22.8 (4)	\$ 22.2 (4)
A-10 Nr. of Acft Procured	2.3 (0)	- (-)
F-15 Nr. of Acft Procured	67.8 (30)	13.3 (18)
F-16 Nr. of Acft Procured	303.1 (96)	156.8 (96)
E-4A/B Nr. of Acft Procured	- (-)	4.1 (1)
E-3A Nr. of Acft Procured	- (-)	8.6 (4)
Modification Spares	110.2	192.2
Common AGE Spares	17.1	16.5
Other Production Spares	18.1	22.6
Total	\$541.4	\$436.3

\*The aircraft initial spares requirements for each fiscal year are computed against the aircraft delivery schedules. Upon the determination of the requirement for each fiscal year's delivered aircraft, minimum essential financing is allocated to each fiscal year to provide adequate funding for item lead time protection.

(In Thousands of Dollars)

Program Requirement - FY 83 ...	\$2,417,500
Program Requirement - FY 82 ...	1,931,200
Program Requirement - FY 81 ...	1,529,243
Program Requirement - FY 80 ...	1,249,454

ACTIVITY: Aircraft Support Equipment and Facilities

PART I PURPOSE AND SCOPE

This activity provides for support equipment required to service and test aircraft and their components; for industrial machinery, equipment and facilities required in the manufacture of items funded by this appropriation; for those war consumable items required to be on hand for immediate use in the event of war; and for other charges such as electronic countermeasure equipment. The activity also provides for procurement of flight simulation equipment for aircraft that are no longer in production, and for programs not associated with one specific weapon system.

PART II JUSTIFICATION OF FUNDS REQUESTED

The estimate for this activity is comprised of the following items: (In Millions of Dollars)

<u>LINE ITEM</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>
Common Ground Equipment	\$278.8	\$257.2	\$333.5	\$426.2
Industrial Facilities	56.8	61.9	96.4	102.6
War Consumables	1.8	7.1	86.6	86.7
Other Production Charges	668.9	821.0	1056.5	1604.8
NATO AWACS	243.1	382.0	358.2	197.2
ACTIVITY TOTALS	\$1249.4	\$1529.2	\$1931.2	\$2417.5

### Common Ground Equipment

This program is for the procurement of organizational, base and depot level support equipment, both common and peculiar, for out-of-production aircraft and for common support equipment for new aircraft entering the inventory. The equipment is used on the flight line, in maintenance shops, and in the depots. The program also provides for the procurement of flight simulators and other training devices for aircraft that are out of production. Support equipment includes depot plant equipment, support equipment for modifications, common training equipment and the following federal supply groups (FSG):

- FSG 17 - Aircraft launching, landing, and ground handling equipment (trailers, platforms, slings).
  - FSG 49 - Maintenance and repair shop equipment (test stands, jigs, fixtures, noise suppressors).
  - FSG 61 - Electric wire and power distribution equipment (generators and generator sets, converters).
  - FSG 66 - Instrument and laboratory equipment (navigational and flight instruments, electrical and electronic measuring and testing equipment).
- Other Federal Supply Groups - Pumps, compressors, air-conditioners, heaters, gauges, and specialized tools.

The following table shows a comparison, by year, by category, of support equipment:

NOMENCLATURE	(In Millions of Dollars)			
	FY 1980	FY 1981	FY 1982	FY 1983
FSG 17	\$ 31.3	\$ 26.1	\$ 32.8	\$ 56.3
FSG 49	67.0	20.6	65.2	89.6
FSG 61	17.5	22.4	29.8	43.0
FSG 66	19.7	24.0	32.3	46.2
Other FSGs	29.2	33.2	54.2	96.1
Depot Plant Equipment	19.5	19.5	19.1	23.3
Common Training Equipment (Simulators)*	94.6	111.4	100.1	71.7
<b>TOTAL COMMON GROUND EQUIPMENT</b>	<b>\$ 278.8</b>	<b>\$ 257.2</b>	<b>\$ 333.5</b>	<b>\$ 426.2</b>

\*FY 82 Common Training Equipment includes simulators for B-52 aircraft.

## Industrial Facilities

The Industrial Facilities program provides for capital type rehabilitation of real property at Air Force owned Industrial facilities; finances preparation for shipment of government production equipment to the Defense Industrial Plant Equipment Center or to other priority Air Force users; provides funds for actions necessary to bring Air Force plants into compliance with noise, air and water antipollution standards and to permit the reduction of energy consumption; and provides funds for the Air Force Industrial Preparedness Planning Program. Funds are also requested for the Manufacturing Technology program which assures the timely establishment and improvement of manufacturing processes, techniques, or equipment required to support current and projected Air Force programs.

The following table shows a comparison, by year, of the Industrial Facilities Program:

(In Millions of Dollars)

	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>
Expansions	1.3	4.9	6.3	.5
Packing, Crating & Handling	.2	.1	.3	.5
Capital Type Rehabilitation	9.3	10.4	20.2	16.6
Modernization	-	.4	.9	.2
Manufacturing Technology	41.3	37.6	60.2	65.5
Industrial Preparedness Planning	.9	-	-	-
Environmental Protection	.7	.2	3.9	8.6
Energy Conservation	3.1	8.3	4.6	10.7
TOTAL Industrial Facilities	56.8	61.9	96.4	102.6

The requirements for FY 1982 in each category in the above table are as follows:

Expansions: Required for real property modifications at Air Force Plant 4 (Fort Worth, Texas); Air Force Plant 6 (Marietta, Georgia); Air Force Plant 42 (Palmdale, California); and others.

Packing, Crating, and Handling: Required to prepare idle government-owned equipment for shipment to other locations.

Capital Type Rehabilitation: Required for rehabilitation of government-owned, contractor-operated Industrial production facilities. Included are Capital Type Rehabilitation projects for property operated by General Dynamics, Fort Worth, Texas; Lockheed-Georgia, Marietta, Georgia; Rockwell International, Palmdale, California; General Electric, Binghamton, New York, and others.

Modernization: Required for updating of overhead crane system at Air Force Plant 4 (General Dynamics, Fort Worth, Texas).

Manufacturing Technology: Required for the establishment, transition and implementation onto the factory floor of new or significantly improved manufacturing methods which are based upon the results of the RDT&E and IR&D programs and which are beyond the current state of the art. Directly improves the productivity of the U.S. industrial base required to produce Air Force systems by validating new manufacturing methods and demonstrating them in the production environment. Establishes a systematic approach to production and manufacturing throughout the aerospace industry, and assures a high return-on-investment (ROI) by timely application of results across the industry, as well as reducing the cost of specific Air Force systems acquisitions. All projects are conducted under contract with private industry through competitive procurement, with results disseminated throughout the industry. All capital facility investments are borne by industry, and projects are negotiated with an Air Force business strategy aimed at securing all data rights, commitments to establish competitive production sources, and a requirement for an open end-of-contract demonstration of results achieved. The FY 1982 program includes emphasis on areas such as metallic structural materials (\$1.6 million); composite structures and materials (\$2.8 million); fluids (\$1.2 million); propulsion materials and components (\$5.8 million); electromagnetic windows and electronic materials and devices (\$1.6 million); Integrated Computer Aided Manufacturing (\$19.0 million); Technology Modernization for the industrial base (\$10.4 million); and Technology Modernization for the Air Logistics Centers (\$20.8 million).

Environmental Protection: Required for atmospheric and water antipollution projects at Air Force Plant 63 (Wyman-Gordon, North Grafton, Massachusetts); Air Force Plant 47 (Alcoa Aluminum, Cleveland, Ohio); and others.

Energy Conservation: Required for high return on investment projects at facilities such as Air Force Plant 4 (General Dynamics, Fort Worth, Texas); Air Force Plant 6 (Lockheed - Georgia, Marietta, Georgia); Air Force Plant 47 (ALCOA Cleveland, Ohio); and Air Force Plant 59 (General Electric, Binghamton, New York).

1 COMPONENT		FY 19 82 FACILITIES PROJECT DATA		2 DATE 17 Sep 80	
3 INSTALLATION AND LOCATION AF Plant #4 General Dynamics Ft Worth TX		4 PROJECT TITLE Expansion			
5 PROGRAM ELEMENT 7801IF		6 CATEGORY CODE 221-221		8 PROJECT COST (\$5000) \$981.2	
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$5000)
1. Cleaning & Chem Film Area for MSE					50.6
2. Radar & Antenna Range Power Outlets					183.5
3. Expansion of scientific calibration Lab					150.0
4. Air Cond Humidity Sys Eng Chem Lab					328.3
5. Replace Automotive Fuel Storage Tanks					216.0
6. Mechanical Gate Control Arm					52.8
36					
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
<p>1. Fabricate and install two stainless steel and four mild steel tanks with necessary plumbing, curbs, drains and wood platforms to permit cleaning and chem filming of fabricated parts. Tank sizes to be approximately 36" x 36" x 48" deep. Install a ventilation system complete with blowers, motors, ducts and controls as required.</p> <p>2. Provide underground power (440 VAC 60) to four locations and provide three power junction boxes at these locations.</p> <p>3. Expand the Scientific Calibration Laboratory to accommodate (1) Satellite Calibration Laboratory equipment being displaced from the Design Development Laboratory, (2) calibration equipment for the Technology Modernization Program, and additional calibration equipment to support the F/FB-111 Program.</p> <p>4. Provide and install equipment and duct work for separate temperature-humidity control of Engineering chemistry Laboratory Area 1 and Area 2.</p> <p>5. Replace two badly deteriorated, underground gasoline storage tanks and their associated plumbing.</p> <p>6. Mechanical Gate Control Arms are required for vehicle gates No. 2, 2A, 6, 8 and 10.</p>					

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1 COMPONENT		FY 1982 FACILITIES PROJECT DATA		2 DATE 17 Sep 80	
3 INSTALLATION AND LOCATION AF Plant 3 McDonnell-Douglas, Tulsa OK					
4 PROJECT TITLE Expansion					
5 PROGRAM ELEMENT 7801IF		6 CATEGORY CODE 221-221		7 PROJECT NUMBER	
8 PROJECT COST (\$000)		\$28.8			
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
Extend Electrical Feeder No 8 to Center Feeder No 3 and Install Selector Switch					\$28.8
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
<p>Extend Feeder 8 to feeder Center 3 and install selector switch to utilize Feeders 8 and 9 for east 750 KVA transformer. This transformer serves Bldg 117, chemical storage, a large trash compactor 75 feet away and processing equipment in Building 1 east bay.</p>					

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1. COMPONENT		FY 19 82 FACILITIES PROJECT DATA		2. DATE		17 Sep 80	
3. INSTALLATION AND LOCATION				4. PROJECT TITLE			
AF Plant # 42 Lockheed-California Palmdale CA				EXPANSION			
5. PROGRAM ELEMENT		6. CATEGORY CODE		7. PROJECT NUMBER		8. PROJECT COST (\$000)	
78011F		222-222				535*0	
9. COST ESTIMATES							
ITEM		U/M		QUANTITY		UNIT COST	
						COST (\$000)	
1. Enclose roof overhang on north side of Building 210		100.0					
2. Motorize hangar doors, Bldg 211		12.0					
3. Install 8 sump pumps in underground utility cubicles, Site 2		65.0					
4. Expand Building 213 to twice capacity		6.0					
5. Install sand recovery pit at equipment sandblasting area, Site 2		2.0					
6. Construct new 80 x 100 maintenance building in Site 2		350.0					
10. DESCRIPTION OF PROPOSED CONSTRUCTION							
<p>1. This project consists of enclosing the remaining 225' of roof overhang extending out from Bldg 210 with sliding doors (three of which are available in storage at Site 3).</p> <p>2. The large "X" hangar doors at the north and south ends of Building 211 (paint hangar building) are manually operated. The size of these doors makes it difficult and hazardous to open manually. Opening them with a fork lift or tug creates maintenance problems. In case of emergency, the ability to open these doors quickly is extremely important.</p> <p>3. Install sump pumps in the eight underground utility cubicles. Currently there are no pumps; everytime it rains the cubicles fill-up with water and short-out power lines.</p> <p>4. Building 213 is a small (510 Sq Ft) metal prefabricated structure currently being used to store flammable and toxic liquids in 55 gallon barrels. The capacity is not large enough to house half the material on hand and this material should be stored inside, out of the elements.</p> <p>5. This project consists of installing a concrete sand recovery pit on the north side of Bldg 210 to recover the sand used in sand blasting metal equipment prior to repainting. The pit will be used to recover the sand for re-use in the sandblasting operation. Currently the sand is not recovered and is costly to replace.</p>							

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6. A prefabricated metal type building (80' x 100') with 18 ft headroom will be built to replace various make-shift buildings currently in use. The building is required to store maintenance materials and provide a paint booth for maintenance equipment.

1 COMPONENT	Air Force	FY 1982	FACILITIES PROJECT DATA	2 DATE 17 Sep 80
3 INSTALLATION AND LOCATION AF Plant #42 Lockheed California Palmdale CA				
4 PROJECT TITLE EXPANSION		5 PROJECT NUMBER		

1 COMPONENT		Air Force		FY 19 82 FACILITIES PROJECT DATA		2 DATE 17 Sep 80	
3 INSTALLATION AND LOCATION AF Plant #6, Lockheed Georgia Co., Marietta, GA				4 PROJECT TITLE EXPANSION			
5 PROGRAM ELEMENT 7801IF		6 CATEGORY CODE 221-221		7 PROJECT NUMBER		8 PROJECT COST (\$000) \$4,490	
9 COST ESTIMATES							
ITEM		U/M		QUANTITY		UNIT COST	
Modify Building B-54						\$4,490	
10 DESCRIPTION OF PROPOSED CONSTRUCTION 07 Major improvements will be made to the building to provide enclosed, heated aircraft work positions that meet all National Fire Protection Association (NFPA) requirements for fueled aircraft. There will be 48 insulated, rolling, 30 foot high hangar doors installed. A 616 foot long 3 ton bridge crane system will be installed in the east and west bays of the building. A new blue print room and an engine shop enclosure will also be constructed. Steam and condensate supply lines will be installed in a concrete utility tunnel. An industrial waste sewer system will be installed and connected to the existing industrial waste treatment plant. All building columns are to be fireproofed. The entire structure will be insulated so as to have a U factor of 0.1 for the walls and a U factor of 0.05 for the roof. The plant compressed air system in B-54 will be upgraded to meet new compressed air demands. Concrete leveling pads and a high pressure sodium vapor lighting system will be installed.							

1 COMPONENT		FY 1982 FACILITIES PROJECT DATA		2 DATE 17 Sep 80	
3 INSTALLATION AND LOCATION AF Plant # 63 Wyman-Gordon North Grafton MA		4 PROJECT TITLE Expansion			
5 PROGRAM ELEMENT 78011F		6 CATEGORY CODE 221-221		7 PROJECT NUMBER 219.0	
8 PROJECT COST (\$000)					
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
New Forge Shop Elevator		LS			219.0
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
<p>Project will provide easy access from the factory floor to the Forge Shop roof. Access is necessary for transporting tools, equipment and personnel required for adequate maintenance of pollution control systems installed on the roof.</p>					

1 COMPONENT		FY 1982 PROCUREMENT PROJECT DATA		2 DATE		15 Sep 80	
3 INSTALLATION AND LOCATION				4 PROJECT TITLE			
AF Plant #19 San Diego CA General Dynamics				Expansion			
5 PROGRAM ELEMENT		6 CATEGORY CODE		7 PROJECT NUMBER		8 PROJECT COST (\$000)	
78011F		221-221				\$50.0	
9 COST ESTIMATES							
ITEM		U/M		QUANTITY		UNIT COST	
Provide Refueling Access to fuel oil tanks.							
42						\$50.0	
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p>This project provides for the installation of a fuel pump station in the vicinity of Bldg 5 and will allow for the pumping of fuel oil to the fuel tanks located on the north side of the Bldg. Additionally, a gate will be installed on the north fence boundary of the plant in the vicinity of the tanks to allow access to the pump station. Permission has been given by the State of California for General Dynamics to access AFP #19 property from State property.</p>							

1 COMPONENT		FY 1982 FACILITIES PROJECT DATA		2 DATE		17 Sep 80	
3 INSTALLATION AND LOCATION		AF Plant # 63 - Wyman Gordon Co North Grafton MA		4 PROJECT TITLE		ENVIRONMENTAL PROTECTION	
5 PROGRAM ELEMENT		78011F		6 CATEGORY CODE		221-221	
7 PROJECT NUMBER				8 PROJECT COST (\$000)		\$2,400	
9 COST ESTIMATES							
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)		
1. Design of a waste water treatment facility (oil/chemical waste)					\$1,000		
2. Air pollution control weather enclosure for the 35/50K ton presses					400		
3. Long lead-time water pollution abatement equipment purchases					1,000		
43							
10 DESCRIPTION OF PROPOSED CONSTRUCTION							
<p>During FY-83, an estimated \$10 Million to \$13 Million will be required for Air Force Plant 63.</p> <p>The design of an industrial waste treatment facility at this plant will eliminate all sources of pollution which are currently polluting the creeks which feed into the Quinsigamond River and also are contaminating the underground water table.</p> <p><b>PROJECT DESCRIPTION</b></p> <p>1. This project consists of the actual design of a waste water treatment facility to handle both oil contaminated and chemically contaminated waste water. The design will be the result of a conceptual design analysis (Phase I) performed by an architect/engineering firm, actively engaged in water pollution abatement construction and who is approved by the State of Massachusetts. Such things as oil in water splitting, primary free-float-ing oil/water separation, secondary oil/water separation, auxiliary press water treatment, chemically contaminated waste water treatment, heat quench water reuse, boiler and cooling tower blowdown treatment, and nitrate, hexavalent chrome, cadmium removal will be covered in the design.</p> <p>2. Installation of a heated and insulated weather protection enclosure around the electrostatic precipitators and prefilter equipment used to control air pollution on the air exhaust from the 35 and 50K ton forging presses. Condensed water forms on the interior walls of the precipitators. The water freezes during the winter months, rendering the precipitators inoperative.</p>							

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1 COMPONENT		FY 1982		FACILITIES PROJECT DATA		2 DATE 17 Sep 80	
Air Force		3 INSTALLATION AND LOCATION AF Plant # 63 - Wyman Gordon CO North Grafton MA					
4 PROJECT TITLE		5 PROJECT NUMBER					
ENVIRONMENTAL PROTECTION							
<p>3. Of utmost importance to the successful completion of any waste water pollution abatement project is the purchase of long lead time water pollution abatement equipment. From the conceptual design analysis (Phase I) performed in FY 81, the A/E has knowledge of the basic long lead time equipment requirements. This project will allow the placement of purchase orders for the long lead time water pollution abatement equipment.</p>							
<div style="position: absolute; top: 50px; left: 50px;">47</div>							

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COMPONENT		FY 1982		PROJECT DATA		17 Sep 80	
3 INSTALLATION AND LOCATION				4 PROJECT TITLE			
AF Plant S9 General Electric				Environmental Protection			
5 PROGRAM ELEMENT		6 CATEGORY CODE		7 PROJECT NUMBER		8 PROJECT COST (\$,000)	
78011F		833-354				\$25.0	
9 COST ESTIMATES							
ITEM		U/M		QUANTITY		UNIT COST	
Construct Solid Waste Handling and Storage Facility						\$25.0	
54							

10 DESCRIPTION OF PROPOSED CONSTRUCTION

The Resource Conservation and Recovery Act of 1976 requires the U.S. Environmental Protection Agency (EPA) to institute a National Hazardous Waste Regulatory Program. Part 3004 of the EPA proposed regulations requires special facilities constructed to their guidelines for the handling and storage of hazardous wastes. Regulations promulgated in March, 1980 have established time tables for notifying EPA of hazardous wastes generated, applying for permits and implementation of control plans. The latter would include construction of necessary facilities. The specific design and composition will be based on the AGE design analysis to meet EPA Regulatory guidelines.

# War Consumables

The funds requested, along with prior funded assets, will provide additional wartime support needed, in the event of hostilities, to sustain operations until such time as production could be expanded to provide the required level of support. Included in this program are auxiliary fuel tanks, pylons, ejector racks and adaptors which are consumed during wartime operations. The FY 82 request starts the acquisition program for F-16 370 gallon tanks and pylons.

The following is a breakout, by fiscal year, of the War Consumables program:

	(In Millions of Dollars)			
	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>
F-16 Aircraft	1.8	\$7.1	\$86.7	\$86.7
HH-53 Aircraft	-	-	5.0	-
TOTAL War Consumables	\$1.8	\$7.1	\$91.7	\$86.7



Other Production Charges

This program provides for items, such as classified projects, Alternate Mission Equipment, and Air Combat Maneuvering Instrumentation, that are not directly related to other procurement lines in this appropriation and cannot be reasonably allocated and charged thereto. It also includes items, such as Electronic Countermeasure (ECM) Pods, Pave Tack Pods, LANTIRN, OBU-15, and Pave Penny Pods, that are used by more than one weapon system and managed as end items themselves.

The following table provides a comparison, by fiscal year, of the items in this program:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982	FY 1983
Classified Projects 1/	\$ 413.9	\$ 560.8	\$ 725.5	\$ 1132.7
ECM Pods	112.8	170.1	220.2	258.9
Pave Tack Pods	94.6	-	-	-
Pave Penny Pods	13.9	-	-	-
Airborne Video Tape Recorder/	12.2	12.4	10.3	9.5
Cockpit TV Sensor	-	-	-	-
Alternate Mission Equipment	8.7	27.0	25.2	16.3
Air Combat Maneuvering	8.0	6.5	7.0	4.5
Instrumentation	-	-	-	-
OBU-15	-	10.2	8.9	10.2
LANTIRN	-	1.0	15.9	118.3
AF Academy Sailplanes	-	-	.5	-
30MM Gun Pods	5.0	33.0	43.0	54.4
TOTAL OTHER PRODUCTION CHARGES	668.9	821.0	1056.5	1604.8

1/ Includes \$32.5 million in FY 80, \$39.1 million in FY 81, \$34.3 million in FY 82, \$82.9 million in FY 83 for NFIP.

Justification for the various line items is as follows:

Classified Projects:

Includes the Air Force Tactical Improvement Program and several National defense projects which are classified Special Access.

ECM Pods:

Includes the procurement of new pods, such as the ALQ-131, and update of inventory pods, such as the ALQ-119, to maintain capability to counter the latest Soviet threats. The pods are used on several tactical strike/reconnaissance aircraft.

Pave Tack Pods:

These pods provide a 24 hour target acquisition/laser designation system for F-4E, RF-4C, and F-111F aircraft.

Pave Penny Pods:

These pods are low-cost laser seekers which detect reflected laser energy from targets designated by other systems such as Pave Tack. The small, 32 pound, pod provides a day and night laser seeker capability to A-10, and A-7 aircraft.

Airborne Video Tape Recorder (AVTR)/Cockpit TV Sensor (CTVS):

The AVTR records all audio available at the aircrew headset and all video displays on the radar/Electro-Optical display and head-up display (HUD). Aircrews, maintenance crews, and combat and training units use the video tape recordings to analyze mission and training results and for trouble shooting and maintenance. The AVTR will be common to the entire tactical force. The CTVS will replace the existing gun camera which employs film; the advantage is that no film processing is required, making the data available for use immediately after landing. The CTVS will provide imagery data to the AVTR for recording, including a split-screen presentation for multiple video sources.

Alternate Mission Equipment:

The program procures electronic warfare and airborne photography/reconnaissance equipment to provide countermeasure capabilities against changing enemy electronic defenses or for other unpredicted and urgent operational requirements.

Air Combat Maneuvering Instrumentation (ACMI):

This is a joint Air Force/Navy program to procure pods which provide accurate kill/no kill data for assessment of tactics and aircrew training at the Air Combat Maneuvering Range. The pod is mounted on a standard launch rail and transmits attitude, airspeed, altitude, angle of attack, and weapons information to ground sites.

GBU-15 PODS: This program provides a radio frequency link between an aircraft and a GBU-15 Modular Guided Weapon System from weapon launch to impact to enable man-in-the-loop guidance for improved weapon CEP and enhanced aircraft survivability. The pods are used on F-4E, F-111F and B-52D aircraft in an interdiction, defense suppression, and sea lane protection role.

Low Altitude Navigation and Targeting Infrared System for Night (LANTIRN):

Includes procurement of new pods to provide a night, under weather capability on the A-10 and F-16 aircraft to automatically attack ground targets on low level mission in a single pass.

Air Force Academy Sailplanes:

10 powered sailplanes will be procured for the Air Force Academy to overcome runway and airspace constraints of 10 soaring program, thereby enhancing flying safety. The program also increases career motivation of cadets by enabling every cadet to solo in a glider.

30MM Gun Pods:

These pods will provide a near term, reliable, relatively low cost, easy-to-employ, anti-armor tank-killing weapon for A-7, F-4 and F-16 fighter aircraft.

U.S. Contribution to NATO Airborne Warning & Control System (AWACS) Aircraft Program:

This program provides the U.S. share of costs, including acquisition, operation, and support, of the NATO AWACS program. The total U.S. share through FY 1986, to be paid in annual increments, is \$1,598 million. NATO's acquisition of its own force of 18 AWACS aircraft, to be complemented by 11 United Kingdom Nimrod Airborne Early Warning aircraft, for operations in Europe will make a major improvement in the military effectiveness of the Alliance, particularly against the growing low level air attack threat posed by the Warsaw Pact. The AWACS force, with attendant equipment, basing, and modification to the European ground radar environment, will provide improved air defense and counter-air operations for NATO forces. It will provide deep look surveillance and deterrence of potential Warsaw Pact threats, and improve the military responsiveness of the Alliance through its early warning, surveillance and information distribution capabilities. In wartime, the AWACS will increase the effectiveness of Allied weapon systems while helping to standardize system capabilities. The NATO AWACS will be interoperable with the USAF AWACS, the UK Nimrod AEW, and with both U.S. tactical and European national command and control systems. The unprecedented Alliance-wide commonly funded program is the most practical way for the Alliance to attain an effective Airborne Early Warning capability.

(In Millions of Dollars)

	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>
NATO AWACS*	\$243.1	\$382.0	\$358.2	\$197.2

\*Does not include impact to NATO AWACS Aircraft Program that results from deletion of the FY 1982 U.S. procurement of two E3A aircraft.

COMPARISON OF FY 1981 PROGRAM REQUIREMENTS AS REFLECTED  
IN FY 1981 BUDGET WITH FY 1981 PROGRAM REQUIREMENTS AS  
SHOWN IN FY 1982 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per 1981 Budget	Total Program Requirements Per 1982 Budget	Increase + or Decrease -
Combat Aircraft .....	\$3,629,400	\$3,981,100	\$+351,700
Airlift Aircraft .....	-	70,800	+70,800
Other Aircraft .....	105,100	100,100	-5,000
Modification of In-Service Aircraft .....	1,816,600	1,831,555	+14,955
Aircraft Spares and Repair Parts .....	1,566,900	2,161,345	+594,445
Aircraft Support Equipment & Facilities ..	1,536,143	1,529,243	-6,900
Reimbursable Program .....	266,538	266,538	-
Total Fiscal Year Program	\$8,920,681	\$9,940,661	\$+1,020,000

EXPLANATION BY BUDGET ACTIVITY

1. Combat Aircraft \$351.7 million). The net increase results from Congressional additions to the FY 1981 Budget (\$375.3): A-10, \$24.0; F-15, 9.0; F-16, \$59.7; A-7K, \$112.6; and, a proposed reprogramming of \$23.6 from the F-16 in this Budget Activity to the Aircraft Spares and Repair Parts Budget Activity.
2. Airlift Aircraft - (+\$70.8 million). Congress added 6 C-130H aircraft to the FY 1981 Budget.
5. Other Aircraft - (-\$5.0 million). The decrease is caused by a proposed reprogramming from this Budget Activity to the Aircraft Spares and Repair Parts Budget Activity.
 

5 Modification of In-Service Aircraft - (+\$15.0 million). The net increase was caused by Congressional additions of \$60.0 (KC-135 reeng: +\$60.0; F/RF-4, +\$25.0; C-130, -\$25.0) and a proposed reprogramming of \$45.0 (F-4, -\$10.0; C-5, -\$5.0; C-141, -\$5.0; C-135, -\$5.0; C-141, -\$5.0; C-141, -\$5.0) from this Budget Activity to the Aircraft Spares and Repair Parts Budget Activity.

6. Aircraft Spares and Repair Parts - (+\$594.4 million). The increase is the result of Congressional additions of \$475.4: A-7K Initial Spares, +\$6.1; F-15 Engine Spares, \$38.1; F-16 Engine Spares, \$32.4; C-130H Initial Spares, \$1.7; Replenishment Spares, \$397.1; and a proposed reprogramming of \$119.0 to this Budget Activity from other Budget Activities in this appropriation to cover increased Peacetime Flying Hour spares requirements.

7. Aircraft Support Equipment and Facilities - (-\$6.9 million). The net decrease is a result of a Congressional addition of \$38.5 for ECM pods and a proposed reprogramming of \$45.4 (Common Group Equip., -\$15.0; Industrial Facilities, -\$15.0; Other Production Charges -\$15.4) from this Budget Activity to the Aircraft Spares and Repair Parts Budget Activity.

8. Reimbursable Program - No change.

COMPARISON OF FY 1981 FINANCING AS REFLECTED  
IN FY 1981 BUDGET WITH FY 1981 FINANCING AS  
SHOWN IN FY 1982 BUDGET

	(In Thousands of Dollars)		
	Financing Per FY 1981 Amended Budget	Financing Per FY 1982 Budget	Increase (+) or Decrease (-)
Program requirements.....	8,920,681	9,940,681	+1,020,000
Program requirements (Service account).....	(8,654,143)	(9,674,143)	(+1,020,000)
Program requirements (Reimbursable).....	(226,538)	(226,538)	(-)
Less:			
Anticipated reimbursements.....	266,538	266,538	-
Appropriation.....	8,654,143	9,674,143	+1,020,000

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1981 program was increased \$1,020,000 thousand by Congress.

COMPARISON OF FY 1980 PROGRAM REQUIREMENTS AS REFLECTED  
IN FY 1981 BUDGET WITH FY 1980 PROGRAM REQUIREMENTS AS  
SHOWN IN FY 1982 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per 1981 Budget	Total Program Requirements Per 1982 Budget	Increase + or Decrease -
Combat Aircraft .....	\$4,007,050	\$3,994,950	\$-12,100
Airlift Aircraft .....	1,620	72,200	+70,580
Other Aircraft .....	43,200	43,000	-200
Modification of In-Service Aircraft .....	1,437,100	1,555,880	+118,780
Aircraft Spares and Repair Parts .....	1,105,570	1,102,100	-3,470
Aircraft Support Equipment and Facilities ..	1,295,724	1,249,434	-46,290
Reimbursable Program .....	361,335	269,416	-91,919
Total Fiscal Year Program	\$8,251,599	\$8,286,980	+\$35,381

EXPLANATION BY BUDGET ACTIVITY

1. Combat Aircraft - (-\$12.1 million). The FY 1980 Supplemental Budget requested an increase of \$20.8 million for inflation; Congress approved \$9.9 million, a decrease of \$10.9 million. \$1.2 million of A-10 funds was reprogrammed to the Modification of In-Service Aircraft Budget Activity for a classified project.
2. Airlift Aircraft - (+\$70.6 million). The Air Force offered \$75.6 million of C-130H funds to finance the FY 1980 Supplemental/FY 1981 Amended Budget; Congress denied this action, giving the funds back. \$5.0 million was transferred from this Budget Activity to the Modification of In-Service Aircraft Budget Activity to finance a classified project.
5. Other Aircraft - (-\$.2 million). Congress denied the request of \$.2 million in the FY 1980 Supplemental Budget for inflation.
5. Modification of In-Service Aircraft - (+\$118.8 million). The Air Force offered \$145.1 million to finance the FY 1980 Supplemental/FY 1981 Budget; Congress accepted \$14.5 million and restored \$130.6 million. The Air Force requested \$8.3 million for inflation in the FY 1980 Supplemental; Congress approved \$3.7 million, a reduction of \$4.6 million. \$2.1 million of F-106 funds was reprogrammed to the National Guard Personnel, Air Force appropriation; \$6.5 million of A-10 funds was reprogrammed to the Military Personnel, Air Force appropriation; \$8.8 million of A-10 funds was reprogrammed to the Operations and Maintenance, Air Force appropriation. \$10.2 million was reprogrammed to this Budget Activity from Combat Aircraft (\$1.2), Airlift Aircraft (\$5.0) and Aircraft Support Equipment and Facilities (\$4.0) for a classified project.



6. Aircraft Spares and Repair Parts - (-\$3.5 million). The Air Force requested \$5.9 million in FY 1980 Supplemental for inflation; Congress approved \$2.4 million, a reduction of \$3.5 million.
7. Aircraft Support Equipment and Facilities - (-\$46.3 million). The Air Force requested \$7.0 million for inflation in the FY 1980 Supplemental; Congress approved \$1.0 million, a reduction of \$6.0 million, \$33.1 million of War Consumables and \$2.6 million of Other Production Charges funds were reprogrammed to the Military Personnel, Air Force appropriation. \$.6 million of Other Production Charges funds was reprogrammed to the Missile Procurement, Air Force appropriation. \$4.0 million was reprogrammed from this Budget Activity to the Modification of In-Service Aircraft Budget Activity for a classified project.
8. Reimbursable Program - (-\$91.9 million). The decrease was due to receipt of fewer customer orders than was anticipated.

COMPARISON OF FY 1980 FINANCING AS REFLECTED  
IN FY 1981 BUDGET WITH FY 1980 FINANCING AS  
SHOWN IN FY 1982 BUDGET

	(In Thousands of Dollars)		
	Financing Per FY 1981 Amended Budget	Financing Per FY 1982 Budget	Increase (+) or Decrease (-)
Program requirements.....	8,251,599	8,286,980	+35,381
Program requirements (Service account).....	(7,890,264)	(8,017,564)	(+127,300)
Program requirements (Reimbursable).....	(361,335)	(269,416)	(-91,919)
Less:			
Anticipated reimbursements.....	467,335	375,416	-91,919
Transferred from other accounts.....	-	17,000	+17,000
Reappropriation.....	13,800	13,800	-
Add:			
Transferred to other accounts.....	194,776 <sup>a/</sup>	75,076	-119,700 <sup>a/</sup>
Unobligated balance to finance subsequent year budget plans.....		9,400	+9,400
Appropriation.....	7,965,240	7,965,240	-

<sup>a/</sup> Includes proposed transfers of \$191,917 to finance the FY 80 Supplemental Amendment.

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1980 program has increased \$35,381 thousand since the submission of the FY 1981 budget. Adjustments by category of financing are explained below:

1. Anticipated Reimbursements. The decrease of \$91,919 thousand is due to fewer actual customer orders in FY 1980.
2. Unobligated Balances Transferred from Other Accounts. \$17,000 thousand was transferred from Shipbuilding and Conversion, Navy, FY 1980, in accordance with the FY 1980 DoD Supplemental Appropriations.
3. Transfer to Other Accounts. \$600 thousand was transferred to Missile Procurement, Air Force, FY 1980; \$18,517 thousand was transferred to Other Procurement, Air Force, FY 1980; \$42,171 thousand was transferred to Military Personnel, Air Force, FY 1980; \$2,100 thousand was transferred to ANG Personnel, Air Force, FY 1980; and \$8,829 was transferred to O&M, Air Force, FY 1980. All transfers were in accordance with Section 734 of the DoD Appropriation Act of 1980.
4. Unobligated Balance to Finance Subsequent Year Budget Plans. Financing adjustment to finance FY 1981 programs per Congressional direction, is specified in P.L. 96-527.

ANALYSIS OF UNOBLIGATED BALANCES - 30 SEPTEMBER 1982  
SUMMARY BY CATEGORY  
(In Millions of Dollars)

	<u>FY 1981</u>	<u>FY 1982</u>	<u>Total</u>	<u>% of Total Unobligated</u>
1. <u>Military Interdepartmental Purchase Requests:</u>				
(MIPRs) . . . . .	\$17.8	\$39.9	\$57.7	1.7%
2. <u>Completing Contractual Arrangements:</u>				
a. Specification Definitions. . . . .	110.4	246.2	356.6	10.5%
b. Price Redeterminations . . . . .	127.3	283.7	411.0	12.1%
c. Definitization of Contracts. . . . .	263.0	586.1	849.1	25.4%
3. <u>Full Funding Policy:</u>				
a. Delayed/Revised Program Release. . . . .	396.8	883.8	1,280.6	37.7%
b. Engineering Changes. . . . .	136.7	304.8	441.5	13.0%
TOTAL UNOBLIGATED FY 1982	\$1,052.0	\$2,344.5	\$3,396.5	

EXPLANATION

Procurement funds are available for obligation for three years because of the extensive lead time required to develop detailed specification, issue Requests for Proposals (RFPs) and to negotiate and finalize contracts for procurement of investment equipment. Unobligated balances are required for programmed and needed items on which contracts have not reached the obligational stage by the end of the fiscal year because of the procurement process.

The following are illustrative of the reasons which will cause unobligated balances at the end of each fiscal year:

1. Military Interdepartmental Purchase Requests (MIPRs) (\$57.7 million) - These documents are used to request one of the other military services to procure Air Force requirements in conjunction with their own or with those of another service. Funds to support these requests remain unobligated until notification of contract award is received from the other military service. Frequently, contractual arrangements will have been completed and the obligation incurred but notification from the other service is not received in time for recording in Air Force records prior to or at the end of a fiscal year.

2. Completing Contractual Arrangements:

a. Specification Definitions (\$356.6 Million) - Unobligated funds result when specifications for newly introduced items cannot be definitized in time to permit contract negotiation prior to or at the end of the fiscal year.

b. Price Redeterminations (\$411.0 million) - Prices are redetermined at intervals throughout the life of a contract. Final obligation for contracts must await negotiations on agreed target-ceiling formulae. In most large contracts, the rewards and penalties of multiple incentives (cost, performance and schedule) cannot be determined and obligated prior to the end of the fiscal year. Funds are reserved for these purposes when upward adjustments seem likely; however, obligation does not occur until a formal redetermination has been agreed upon and the contract amended. Unobligated funds at year end result.

c. Definitization of Contracts (\$849.1 million) - Procurements of complex systems and large material orders may occasionally be initiated under letter contracts. The letter contract generates a partial obligation of the total program value with the balance remaining committed but unobligated pending definitization and negotiation of the detailed contract terms. These actions can carry over the end of a fiscal year and result in unobligated funds.

3. Full Funding Policy - This policy, enunciated in DoD Directive 7200.4 (October 30, 1969) provides that adequate appropriations and funds must be available in a given fiscal year for obligation, committed or set aside in a reserve account in an aggregate amount sufficient to complete the procurement of a specified number of end items and advance procurement for approved programs. Unobligated balances at the end of a fiscal year are a consequence of this policy and accrue in the following categories:

a. Delayed/Revised Program Release (\$1,280.6 million) - Adjustments in quantities or specifications of other equipment to meet changing situations or to exploit engineering improvements generally require prior approval of reprogramming requests which can delay program release and direction until well into the fiscal year, thus delaying the obligation of funds by the end of the fiscal year. Also, approved and funded programs are sometimes delayed/undirected beyond 30 September pending decision on an aspect of the program that has arisen requiring resolution before proceeding.

b. Engineering Changes (\$441.5 million) - Based on prior experience with systems of like nature and complexities, provision is made in procurement programs, as a percentage of the estimated cost of the item, to cover engineering improvements and design changes which will occur as a result of manufacturing experience of Air Force requirements. Engineering changes are not definitive requirements known in advance and they cannot be obligated until the change is authorized and directed. These changes occur throughout the life of the production contract and result in unobligated balances.

## FY82 PRESIDENTS BUDGET

19 Jan 81

FLIGHT SIMULATOR PROCUREMENT PROGRAM  
(DOLLARS IN MILLIONS)

## APPROPRIATION: Aircraft Procurement, Air Force

Weapon System	Type	P-1 Line Item	FY 80		FY 81		FY 82		FY 83		FY 84	
			Qty	6 Prior Amt	Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
F-16	OFT	6	12	55.9	1	4.9	1	5.3	1	5.7	1	6.0
	ADD. CAP 1/			29.3		32.4		33.3		31.4		52.3
	TOTAL		12	85.2	1	37.3	1	38.6	1	37.1	1	58.3
KC-135	WST UPDATE	45/46		2.0		2.4	2/					
	LCT											
	SPARES TOTAL			2.0		2.4					4	28.4
B-52	OAS PTT	45/46	4	1.9								
	WST/OSMT		4	166.4	2/1	109.0	5	100.1	3	63.2	4	83.8
	SPARES TOTAL		4/4	180.1	2/1	114.7	5	107.9	3	67.7	4	10.7
EP-111	USAFE EWT	45/46										
	SPARES											
	TOTAL									1	8.5	
KC-10	MS	8		4.1	1	12.5						
	CPT/BOPTT			.5	1/1	2.1						
	TOTAL			4.6	1/1/1	14.6						
TOTAL				271.9		169.0		146.5		115.8		183.8

1/ Includes simulation capabilities for Electronic Warfare, Adaptive Training, Digital Radar Landmass, Limited Takeoff and Landing.

2/ The WST Update is not related to the Low Cost Trainer Program, scheduled for procurement in FY 84.

PY 82 PRESIDENTS BUDGET

19 Jan 81

FLIGHT SIMULATOR PROCUREMENT PROGRAM  
(DOLLARS IN MILLIONS)

APPROPRIATION: Aircraft Procurement, Air Force

Weapon System	Type	P-1 Line Item	FY 85		FY 86		COST TO COMPLETE		TOTAL COST	
			Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
P-16	OFT	6	2	12.8	2	13.5			20	104.1
	ADD. CAP 1/			58.6		38.8				276.1
	TOTAL		2	71.4	2	52.3			20	380.2
KC-135	WST UPDATE	45/46								4.4
	LCT		10	70.5	10	72.2	11	80.0	35	251.1
	SPARES			3.8		4.2		5.0		15.6
	TOTAL		10	74.3	10	76.4	11	85.0	35	271.1
B-52	OAS PTT	45/46							4	1.9
	WST/OSMT								18/1	522.5
	SPARES									42.7
	TOTAL								4/18/1	567.1
EF-111	USAF EWT	45/46							1	8.5
	SPARES									.3
	TOTAL								1	8.8
KC-10	MS	8							1	16.6
	CPT/BOPTT								1/1	2.6
	TOTAL								1/1/1	19.2
TOTAL				145.7		128.7		85.0		1246.4

Legend

BOPTT	Boom Operator Part Task Trainer
CPT	Cockpit Procedures Trainer
EWPTT	Electronic Warfare Part Task Trainer
EWT	Electronic Warfare Trainer
LCT	Low Cost Trainer
MS	Mission Simulator
OASPTT	Offensive Avionics System Part Task Trainer
OFT	Operational Flight Trainer
OSMT	Offensive System Mission Trainer
WST	Weapon System Trainer



MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: TAIL WARNING SYSTEM, MN-2923

MODELS OF AIRCRAFT AFFECTED: B-52 G/H

DESCRIPTION/JUSTIFICATION: INSTALLATION OF ACTIVE RADAR SYSTEM TO PROVIDE DETECTION AND WARNING OF AIR TO AIR MISSILE THREATS AGAINST THE B-52. PROVIDES AUTOMATIC MANAGEMENT OF EXPENDABLE COUNTERMEASURES (INFRARED FLARES) USED TO DECOY IR-SEEKING MISSILES. CAPABILITY TO DETECT AIR TO AIR MISSILES, THUS INFORMATION NEEDED TO DISPENSE FLARES WITH HIGH

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
NONRECURRING	2	5.9									2	5.9
KITS	102	25.3	64	16.3	61	16.1	39	11.9			266	69.6
DATA		8.2										8.2
TRAINER		.6										.6
SUPPORT EQUIP.		16.1										16.1
TOTAL	104	56.1	64	16.3	61	16.1	39	11.9			268	100.4

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/PDM  
LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: ECM TRANSMITTER UPDATE, MN-297C

MODELS OF AIRCRAFT AFFECTED: B-52 G/H

DESCRIPTION/JUSTIFICATION: REPLACES TWO OBSOLETE ALT 6-B ECM TRANSMITTERS PER AIRCRAFT WITH CURRENT ALT-28 SYSTEMS, INCLUDING FREQUENCY COVERAGE IN EXISTING "GAP" AND ADDITION OF INCREASED MODULATOR PROGRAMMING CAPABILITY. THIS MODIFICATION IS REQUIRED TO PROVIDE INCREASED JAMMER POWER, FREQUENCY COVERAGE, AND TECHNIQUE PROGRAMMING AGAINST CURRENT RADAR THREAT ENVIRONMENT.

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE:

QTY	PRICE CCST	FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
		QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
156	39.2	63	11.1	49	3.8					268	54.1
NONRECURRING											
1	3.5									1	3.5
155	20.0	63	7.7	49	3.8					267	31.5
	2.1										2.1
	2.5										2.5
	2.2										2.2
	7.1		3.4								10.5
	1.8										1.8
156	39.2	63	11.1	49	3.8					268	54.1

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/PCM  
LEAD TIME - 15 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: ECM POWER MANAGEMENT, MN-2973

MODELS OF AIRCRAFT AFFECTED: B-52 G/H

DESCRIPTION/JUSTIFICATION: THERE IS AN URGENT OPERATIONAL REQUIREMENT FOR IMPROVED CAPABILITY OF EXISTING B-52 G/H ALT-28 TRANSMITTER SYSTEM. INCREASED DENSITY AND SOPHISTICATION OF RADAR THREATS CAN SATURATE THE CURRENT ECM SYSTEMS IN THE B-52. POWER MANAGEMENT WILL SIGNIFICANTLY IMPROVE JAMMING EFFECTIVENESS BY PROVIDING AUTOMATIC AND RAPID THREAT RADAR FREQUENCY SET-ON AND INITIATION OF APPROPRIATE COUNTERMEASURES PROGRAMS.

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
NONRECURRING	1	.9									1	.9
KITS	155	38.3	63	15.4	49	9.8					267	67.5
DATA		4.9										4.9
TRAINFR		6.7										6.7
SUPPORT EQUIP.		8.8										8.8
CIPS		5.3										5.3
TOTAL	156	64.9	63	19.4	49	9.8					268	94.1

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT/PCM  
LEAD TIME - 15 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: ALCM-CARRIER AIRCRAFT, MN-3022

MODELS OF AIRCRAFT AFFECTED: B-52C

DESCRIPTION/JUSTIFICATION: PROVIDES THE B-52G AIRCRAFT WITH THE CAPABILITY TO CARRY AND LAUNCH THE LONG RANGE AIR LAUNCHED CRUISE MISSILE. PROVIDES FOR EXTERNAL AND INTERNAL CARRIAGE.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
	25	115.9	40	116.1	40	118.9	41	167.6	26	421.0	172	935.5
BASIS FOR COST ESTIMATE:												
NONRECURRING		4.6		1.9		.9		2.1		52.0		9.5
KITS	25	23.9	40	34.9	40	40.7	41	47.5	26	52.0	172	199.0
DATA		4.6		1.4						1.6		7.6
TRAINER		1.3										1.3
SUPPORT EQUIP.		1.8		2.2		1.6		1.9		.8		8.4
TOOLING		41.7						30.0		12.0		83.7
PYLON		38.0		75.6		75.7		84.0		51.0		324.3
LAUNCHERS								2.0		210.2		212.2
BOMB BAY (INT)								.1		93.4		93.5
TOTAL	25	115.9	40	116.1	40	118.9	41	167.6	26	421.0	172	939.5

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/POW  
LEAD TIME - 26 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: AVIONICS MODERNIZATION, MN-3023

MODELS OF AIRCRAFT AFFECTED: B-52 G/H

DESCRIPTION/JUSTIFICATION: PRESENT BOMBING NAVIGATION SYSTEM WAS DESIGNED USING 1950 TECHNOLOGY. SYSTEM SUFFERS FROM LOW RELIABILITY, HIGH SUPPORT COST AND INADEQUATE CAPABILITY THUS REDUCING WEAPON SYSTEM EFFECTIVENESS. UPDATE REPLACES PRESENT ANALOG SYSTEM WITH A DIGITAL SYSTEM AND STATE-OF-THE ART SENSORS AND SUBSYSTEMS. NEW SYSTEM IS REQUIRED TO MEET THE STRATEGIC BOMBER MISSION REQUIREMENTS AND TO INTERFACE WITH THE INTRODUCTION OF CRUISE MISSILES ON THE B-52.

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
NONRECURRING												
KITS	36	123.1	64	180.5	61	169.3	64	177.6	43	116.1	268	766.6
DATA		38.5		5.0		1.4		.9		.8		46.6
TRAINER		47.5		13.2						17.4		78.2
SUPPORT EQUIP.		109.8		24.4		12.7		13.6		10.7		171.2
TOOLING		9.7										9.7
TOTAL	36	282.3	64	235.0	61	210.1	64	206.9	43	162.0	268	1200.3

METHOD OF IMPLEMENTATION: INSTALLATION - DEFCT/PCM  
LEAD TIME - 24 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: ODS/FRCDS, MN-3041

MODELS OF AIRCRAFT AFFECTED: B-52G

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION SUPPORTS THE SALT II. B-52 BOMBERS CAPABLE OF LAUNCHING ALCM'S MUST BE IDENTIFIABLE FROM OVERHEAD FOR SALT II/MIRV COUNTING PURPOSES. THE MOD MUST BE COMPLETED AND FULLY INTEGRATED INTO MOD/DELIVERY SCHEDULE FOR B-52G MODS FOR OFFENSIVE AVIONICS SYSTEM AND CRUISE MISSILE CARRIAGE. IT MUST MEET THE SCHEDULE FOR FIRST DELIVERY OF MODIFIED B-52 AIRCRAFT FOR ALCM CARRIAGE.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	24	28.8	40	10.0	40	5.7	41	4.6	27	3.2	172	52.3
NONRECURRING		20.0		3.9								
KITS	24	3.0	40	5.5	40	5.7	41	4.6	27	3.2	172	23.9
DATA		.6		.3								.9
TOOLING		5.2		.3								5.5
TOTAL	24	28.8	40	10.0	40	5.7	41	4.6	27	3.2	172	52.3

METHOD OF IMPLEMENTATION: INSTALLATION - DEFCT/PDM  
LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: AIRCRAFT MONITOR AND CONTROL (AMAC)

MODELS OF AIRCRAFT AFFECTED: B-52D/G/H

DESCRIPTION/JUSTIFICATION: IMPLEMENTS THE AIRCRAFT PORTION OF THE NUCLEAR STOCKPILE IMPROVEMENT PROGRAM FOR GRAVITY WEAPONS ON THE B-52 D/G/H AIRCRAFT. NEW AMAC IS REQUIRED TO INTERFACE WITH NEW AND UPDATED NUCLEAR GRAVITY WEAPONS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
					166	12.7	181	14.9			347	27.6
BASIS FOR COST ESTIMATE:												
NONRECURRING					3	1.0					3	1.0
KITS					163	8.8	181	9.1			344	17.9
DATA						.8						.8
SUPPORT EQUIP.						1.6		5.5				7.1
TRAINER						.5		.3				.8
	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL					166	12.7	181	14.9			347	27.6

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT/FIELD TEAM  
LEAD TIME - 24 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: NUCLEAR HARDENING

MODELS OF AIRCRAFT AFFECTED: B-52G/H

DESCRIPTION/JUSTIFICATION: THE PURPOSE OF THIS ELECTROMAGNETIC PULSE (EMP) MODIFICATION TO THE B-52G/H AIRCRAFT IS TO IMPROVE THE SURVIVABILITY AND VULNERABILITY (S/V) OF THE AIRCRAFT TO NUCLEAR EFFECTS. THE MODIFICATION WILL ADDRESS THE EFFECTS OF BLAST, THERMAL, AND EMP FOR THE BASIC AIRCRAFT SYSTEM VULNERABILITIES IDENTIFIED DURING ROT&E AND TESTING PHASES OF THIS PROGRAM.

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
KITS			15	20.0	67	82.6	62	66.3	124	119.7	268	288.6
DATA			15	16.0	67	68.3	62	62.1	124	118.1	268	264.5
SUPPORT EQUIP.				2.0		.8		.8		1.6		5.2
				2.0		13.5		3.4				18.9
TOTAL			15	20.0	67	82.6	62	66.3	124	119.7	268	288.6

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/PDM  
LEAD TIME - 21 MONTHS



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# MODIFICATION OF AIRCRAFT FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: AUTOMATIC FLIGHT CONTROL SYSTEM (AFCS), MN-18420R

MODELS OF AIRCRAFT AFFECTED: B-52D

DESCRIPTION/JUSTIFICATION: PROVIDES FOR GENERAL IMPROVEMENT IN B-52D AFCS MAINTAINABILITY, SAFETY AND RELIABILITY BY ADDING A DUAL PITCH CHANNEL AND REPLACING THE MAIN AMPLIFIER, SERVO CONTROL AND STEERING COUPLER WITH ONE SCLIC STATE LINE REPLACEABLE UNIT. IT ALSO REPLACES THE COMMAND SELECTOR, FORCE TRANSDUCER, SAFETY MONITOR, AND REMOVES THE AUTO APPROACH AMPLIFIER AND RELAY BOX. IT REPLACES THE N-1 COMPASS SYSTEM WITH A NEW ATTITUDE HEADING AND REFERENCE SYSTEM. SYSTEM RELIABILITY IS DECREASING AND THE PITCH AXIS PRESENTS A SAFETY HAZARD IN LOW LEVEL AND AERIAL REFUEL MODES.

## SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	COST	QTY	CCST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
	4		4	5.7	19	7.3	55	26.1			78	39.1
	4	1.4	4	1.4	19	7.3	55	26.1			78	34.8
		1.9		1.9								1.9
		1.0		1.0								1.0
		1.4		1.4								1.4
	---	---	---	---	---	---	---	---	---	---	---	---
	4		4	5.7	19	7.3	55	26.1			78	39.1

## BASIS FOR COST ESTIMATE:

KITS  
DATA  
TRAINER  
SUPPORT EQUIP.

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT/PDM  
LEAD TIME - 22 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: COMMON STRATEGIC DOPPLER, MN-18441B

MODELS OF AIRCRAFT AFFECTED: B-52D

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION WILL REPLACE THE 1950 VINTAGE AN/APN-108 DOPPLER RADAR SYSTEM WITH THE NEW SOLID STATE COMMON STRATEGIC DOPPLER SYSTEM. THE CURRENT MEAN TIME BETWEEN FAILURE (MTBF) OF THE APN-108 SYSTEM IS 32 HOURS. IT IS ANTICIPATED THAT THE MTBF OF THE NEW COMMON STRATEGIC DOPPLER SYSTEM WILL BE 2000 HOURS. ON TWENTY PERCENT OF ALL SORTIES, FLIGHT CREWS EXPERIENCE SYSTEM DEGRADATION THAT REQUIRE WORK-AROUND PROCEDURES OR CONTRIBUTE TO INACCURACIES IN THE BOMBING SYSTEM.

SCOPE OF PROGRAM:

PRICE	FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---
	1	6.8	12	7.9	66	10.2			79	24.9
	1	5.1	12	4.1	66	10.2			1	5.1
		1.7							78	14.3
										1.7
										2.6
										1.1
										.1
	1	6.8	12	7.9	66	10.2			79	24.9

BASIS FOR COST ESTIMATE:

NONRECURRING  
KITS  
DATA  
TRAINER  
SUPPORT EQUIP.  
TOOLING

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 16 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: REFURBISH MB-41 COCKPIT PROCEDURES TRAINER, MN-18548B

MODELS OF AIRCRAFT AFFECTED: B-52D

DESCRIPTION/JUSTIFICATION: MB-41 (B-52D) COCKPIT PROCEDURES TRAINERS (CPIS) IN SAC INVENTORY ARE APPROXIMATELY 25 YEARS OLD AND HAVE ACCUMULATED OVER 300,000 TOTAL TRAINING HOURS. THE EXISTING TRAINERS WILL BE REQUIRED TO PROVIDE AN ADDITIONAL 300,000 TRAINING HOURS AND MUST BE SUPPORTED FOR 20+ YEARS. CURRENT TRAINERS ARE RAPIDLY BECOMING UNSUPPORTABLE. PRIME CONTRACTOR IS OUT OF BUSINESS. THIS MOD WILL COMPLETELY REFURBISH EXISTING TRAINER INCLUDING PROVISION OF NEW DIGITAL COMPUTER.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:							5	8.6			5	8.6
KITS												
SUPPORT EQUIP.							5	8.5			5	8.5
TOTAL								.1				.1
							5	8.6			5	8.6

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 17 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: MODERNIZE DEFENSIVE FIRE CONTROL, MN-196118

MODELS OF AIRCRAFT AFFECTED: B-52F

DESCRIPTION/JUSTIFICATION: THE FAILURE RATE OF THE ASG-21 FIRE CONTROL SYSTEM IS INCREASING RAPIDLY, AS WELL AS THE CONDEMNATION RATE OF THE COMPONENTS. THIS RESULTS IN HIGH LOGISTICS SUPPORT COSTS. THIS MODIFICATION WILL REDUCE THE NUMBER OF LINE REPLACEABLE UNITS, UPDATE THE SYSTEMS TO CURRENT TECHNOLOGY, AND PROVIDE LOGISTICALLY SUPPORTABLE SYSTEMS. THE IMPROVED PERFORMANCE WILL ENHANCE MISSION ACCOMPLISHMENT.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	4	16.4	55	35.5	33	19.3					96	71.2
KITS	4	2.4	59	31.3	33	19.3					96	53.0
DATA		9.1										9.1
SUPPORT EQUIP.		4.9		4.2								9.1
TOTAL	4	16.4	59	35.5	33	19.3					96	71.2

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/FIELD  
LEAD TIME - 22 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: LOW ALTITUDE RADAR ALTIMETER, MN-40003B

MODELS OF AIRCRAFT AFFECTED: B-52D

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION WILL REPLACE THE 1950 VINTAGE AN/APN-150 RADAR ALTIMETER SYSTEM WITH THE NEW SOLID STATE DIGITAL LOW ALTITUDE RADAR ALTIMETER AN/APN-224. THIS INSTALLATION WILL IMPROVE THE RELIABILITY OF THE SYSTEM AND ELIMINATE THE ECM INTERFERENCE PROBLEM EXPERIENCED IN THE APN-150 SYSTEM. THE MEAN TIME BETWEEN FAILURE (MTBF) FOR THE AN/APN-150 IS 44 HOURS. THE MTBF FOR THE AN/APN-224 IS ESTIMATED AT 1875 HOURS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		CUIYEAR		TOTAL	
	QTY	COST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST
NONRECURRING												
KITS			1	3.6			12	1.0	66	7.6	1	3.6
DATA					1.7						78	8.6
TRAINER							1.0					1.7
SUPPORT EQUIP.							.8					1.0
TOOLING							.1					.8
TOTAL			1	5.3	12	2.9	66	7.6	79	15.8		

BASIS FOR COST ESTIMATE:

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 16 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: 20MM LINKLESS FEED, MN-67069B

MODELS OF AIRCRAFT AFFECTED: B-52F

DESCRIPTION/JUSTIFICATION: PRESENT AMMO FEED/STORAGE SYSTEMS ARE ANTIQUATED. THE LINKED AMMO SYSTEM DEMONSTRATES APPROX 60% RELIABILITY. PRINCIPAL CAUSES ARE AMMO CAM, CROSS-OVER AND CHUTE JAMS. MAINTENANCE OFTEN INVOLVES EXTENSIVE SHEET METAL WORK WHICH IS TIME CONSUMING AND COSTLY. PERIODIC MAINTENANCE ON THE DRUM OCCURS AT 30,000 ROUND INTERVALS AND ON CONVEYOR SYSTEMS AT 15,000 ROUND INTERVALS. BY CHANGING TO THE LINKLESS SYSTEM, REDUCED MAINTENANCE WOULD RESULT WITH RELIABILITY INCREASED TO APPROX 92 PERCENT.

SCOPE OF PROGRAM:

PRIORITY	FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
1	1.7		78	8.6	17	1.2			96	11.5
1	1.5		78	8.6	17	1.2			1	1.5
	.2								95	9.8
										.2
TOTAL	1	1.7	78	8.6	17	1.2			96	11.5

BASIS FOR COST ESTIMATE:

NONRECURRING

KITS

DATA

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/FIELD  
LEAD TIME - 13 MONTHS





MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: WEAPON IMPROVEMENT AND SERVICE EXTENSION, MN-18245B

MODELS OF AIRCRAFT AFFECTED: F-106A/B

DESCRIPTION/JUSTIFICATION: THIS MOD REPLACES THE RADAR INDICATOR AND 19 RADAR LINE REPLACEABLE UNITS, WITH A STATE-OF-THE-ART INDICATOR, PROCESSOR, AND MAGNETRON. THE MEAN TIME BETWEEN FAILURE OF THE PRESENT SYSTEM IS 2 HOURS. THIS MOD WILL IMPROVE IT TO 37 HOURS AND EXTEND THE SERVICE LIFE OF THE RADAR INTO THE 1990'S. THE LOW RELIABILITY AND CURRENT CRITICAL SUPPORTABILITY OF THE PRESENT SYSTEM IS ADVERSELY AFFECTING MISSION CAPABILITY OF THE ENTIRE F-106 INVENTORY.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		CULTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	COST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS			4	11.9			79	19.1	124	24.1	4	11.9
DATA						3.1		3.3			203	43.2
TRAINER								3.6				6.4
SUPPORT EQUIP.								2.0		4.9		3.6
TOTAL			4	15.0	79	28.0	124	29.0			207	72.0

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 34 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: X BAND TRANSISTOR ASSY., MN-18246B

MODELS OF AIRCRAFT AFFECTED: F-106

DESCRIPTION/JUSTIFICATION: INCORPORATES A NEW RADAR RECEIVER INTO THE MA-1/ASQ-25 FIRE CONTROL SYSTEM. THE PRESENT RADAR RECEIVER HAS A LOW RELIABILITY AND A PARAMETRIC AMPLIFIER WHICH IS OBSOLETE AND BECOMING LOGISTICALLY UNSUPPORTABLE. THE LOGISTICS SUPPORT COST OF THE PRESENT RECEIVER IS APPROXIMATELY \$3.0 MILLION PER YEAR. THE NEW RECEIVER WHICH CONSISTS OF AN X BAND TRANSISTOR AND ASSEMBLY WILL REDUCE THE ANNUAL SUPPORT COST TO ONE THIRD OF THE CURRENT COST. THE LOW RELIABILITY OF THE PRESENT RADAR RECEIVER CAUSES F-106 MISSION DEGRADATION.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	1	1.9	21	6.0	146	11.3	39	3.5			207	22.7
NONRECURRING		1.7		3.1								4.8
KITS	1	.1	21	1.3	146	9.8	39	2.9			207	14.1
DATA		.1		.7								.8
TRAINER				.5								.5
SUPPORT EQUIP.				.4		1.5		.6				2.5
TOTAL	1	1.9	21	6.0	146	11.3	39	3.5			207	22.7

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT  
LEAD TIME - 32 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: '82-42/42A UFT UPDATE, MN-195(CP

MODELS OF AIRCRAFT AFFECTED: F-106 SIMULATOR

DESCRIPTION/JUSTIFICATION: THE '82-42/42A IS 1982 TECHNOLOGY UTILIZING OBSOLETE ANALOG DESIGN. THIS MODIFICATION WILL PROVIDE STATE-OF-THE-ART SIMULATION THROUGH USE OF DIGITAL TECHNOLOGY FOR TRAINER FIDELITY AND COMPATIBILITY. JUSTIFICATION FOR THIS MODIFICATION IS INCREASED AVAILABILITY FOR TRAINING, INCREASED TRAINER FIDELITY REDUCED LOGISTIC SUPPORT COST AND ABILITY TO UPDATE TRAINER TO CURRENT AIRCRAFT TACTICS BY SOFTWARE CHANGE IN LIEU OF MORE COSTLY ANALOG HARDWARE CHANGE.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
KITS												
SUPPORT EQUIP.												
TOTAL												

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: VOR/ILS/MARKER BEACON, MN-222458

MODELS OF AIRCRAFT AFFECTED: F-106

DESCRIPTION/JUSTIFICATION: REPLACE THE PRESENT ILS SYSTEM WITH A VOR/ILS SYSTEM. THE PRESENT ILS SYSTEM IS AN OLD TUBE TYPE SYSTEM AND IS DIFFICULT TO MAINTAIN IN AN ALIGNED STATE DUE TO COMPONENT DRIFT. THIS DRIFT RESULTS IN INCORRECT OR NO GLIDE SLOPE OR LOCALIZER SIGNALS BEING PRESENTED TO THE PILOT. THE NEW EQUIPMENT IS PREDICTED TO IMPROVE RELIABILITY APPROXIMATELY 8:1.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS					210	1.0					210	1.0
DATA						3.1						3.1
TRAINER						.1						.1
SUPPORT EQUIP.						.5		4.5				4.5
TOTAL					210	4.7		4.5			210	9.2

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 21 MONTHS

MODIFICATION CF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: TF-41 HP TURBINE, MN-47816B

MODELS OF AIRCRAFT AFFECTED: A-7D(TF-41 ENGINE)

DESCRIPTION/JUSTIFICATION: THE TF-41 HAS HAD SERIOUS PROBLEMS WITH FAILURES IN THE HOT SECTION, IN MANY CASES DIRECTLY RELATED TO THE SECOND-STAGE HIGH PRESSURE TURBINE BLADE. NUMEROUS FAILURES HAVE RESULTED IN A SAFETY-CF-FLIGHT PROBLEM AND GROUNDING OF AIRCRAFT WHILE THE ENGINE WAS FORCED INTO THE OVERHAUL LINE. THIS MODIFICATION PROVIDES A LONG TERM CORRECTION FOR THE HIGH PRESSURE TURBINE FAILURES.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	30	3.3			134	7.5	134	7.5	237	13.5	535	32.2
NONRECURRING		.8										.8
KITS	30	2.5			134	7.9	134	7.5	237	13.5	535	31.4
TOTAL	30	3.3			134	7.9	134	7.5	237	13.5	535	32.2

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 9 MONTHS

FY-92 APPROPRIATION: AIRCRAFT PURCHASEMENT, AIR FORCE  
MODIFICATION TITLE AND NC: AMPLIFIER REPLACEMENT, MN-48846B  
MODELS OF AIRCRAFT AFFECTED: A-7, TF-41

DESCRIPTION/JUSTIFICATION: NEW DESIGN AMPLIFIER TO REPLACE EXISTING CAPACITOR, WHICH HAS A DETRIMENTAL FAILURE HISTORY OF 965 FAILURES INCLUDING ONE AIRCRAFT LOSS AND 4 INFLIGHT EMERGENCIES. NEW DESIGN INCORPORATES INTEGRATED PRINTED CIRCUITRY WITH THE FOLLOWING ADVANTAGES: 1. 10% REDUCTION IN NEW COST. 2. 50% REDUCTION IN REPAIR LABOR. 3. NO PARTS OBSOLESCENCE. 4. 16% FEWER PARTS. 5. PRECISION CONTROL OF ENGINE LIMITS.

[illegible]

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT/FIELD  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: DIGITAL SCAN CONVERTER, MN-68C45B

MODELS OF AIRCRAFT AFFECTED: A-7D

DESCRIPTION/JUSTIFICATION: MODIFICATION WILL REPLACE TWO LINE REPLACEABLE UNITS (LRU) WITH THE DIGITAL SCAN CONVERTER. THE AN/APC-126 RADAR DISPLAY SUB-GROUP INSTALLED IN A-7D AIRCRAFT IS EXPERIENCING A LOW MEAN TIME BETWEEN FAILURE (MTBF) RELIABILITY OF 80 HOURS. THE COMBINED MTBF OF THE PROPOSED DIGITAL SCAN CONVERTER GROUP IS 500 HOURS BASED ON MORE THAN TWO YEARS OF FLYING IN AN OPERATIONAL ENVIRONMENT.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OULTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:			80	4.5	192	11.3	87	5.0		2.5	359	23.3
KITS			80	3.2	192	10.3	87	5.0			359	18.5
DATA				.4								.4
TRAINER				.5								.5
SUPPORT EQUIP.				.4		1.0				2.5		3.9
TOTAL			80	4.5	192	11.3	87	5.0		2.5	359	23.3

METHOD OF IMPLEMENTATION: INSTALLATION - CRCG/INTERMEDIATE  
LEAD TIME - 10 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: INERTIAL NAVIGATION SYSTEM (INS), MN-3048

MODELS OF AIRCRAFT AFFECTED: A-10

DESCRIPTION/JUSTIFICATION: INS WILL PROVIDE AN AUTONOMOUS NAVIGATION CAPABILITY. LOW LEVEL TACTICS IMPOSED BY COMBAT ENVIRONMENT PRECLUDES RELIANCE ON EXTERNAL NAVIGATIONAL AIDS. EUROPEAN TERRAIN AND WEATHER DICTATE AUTONOMOUS CAPABILITY IN TACTICAL SITUATIONS. A-10 NAVIGATION REQUIREMENT DOCUMENTED IN OPERATIONAL EVALUATIONS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		TOTAL	
	QTY	COST	QTY	COST	QTY	CCST	QTY	CCST	QTY	COST
	67	26.8	64	28.2	63	29.4	216	117.7	410	202.1
BASIS FOR COST ESTIMATE:										
NONRECURRING	1	3.3			63	29.4	216	117.7	1	3.3
KITS	66	22.8	64	28.2	63	29.4	216	117.7	409	198.1
DATA		.7								.7
TOTAL	67	26.8	64	28.2	63	29.4	216	117.7	410	202.1

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 24 MONTHS



## DESCRIPTIVE/JUSTIFICATION:

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: QUELE BAFFLE DEFLECTOR, MN-10336A

MODELS OF AIRCRAFT AFFECTED: A-10

DESCRIPTION/JUSTIFICATION: A DOUBLE BAFFLE DEFLECTOR IS TO BE ADDED TO THE BARRELS OF THE GAU 8 GUN TO DEFLECT THE GUN GAS DOWNWARD AWAY FROM THE AIRCRAFT. WILL ELIMINATE ENGINE INTAKE GUN GAS INGESTION WHICH CAUSES COMPRESSOR STALLS. IN ADDITION, BENEFITS WILL ACCRUE FROM A REDUCTION IN CORROSION TO THE ALUMINUM AIRCRAFT SKIN.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
	82		82	2.0	134	2.5	134	2.6	268	5.6	618	12.7
NONRECURRING			82	1.2	134	2.5	134	2.6	268	5.6	618	11.9
KITS				.1								.1
DATA				.1								.2
TRAINER				.2								.2
SUPPORT EQUIP.				.2								.2
TOOLING												
TOTAL			82	2.0	134	2.5	134	2.6	268	5.6	618	12.7

BASIS FOR COST ESTIMATE:

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT/FIELD TEAM  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: OUTER WING FATIGUE RESKIN, MN-10338P

MODELS OF AIRCRAFT AFFECTED: A-10

DESCRIPTION/JUSTIFICATION: DURING ACCELERATED TESTING TO DETERMINE FATIGUE LIMITS OF THE AIRFRAME, A MAJOR FAILURE OCCURRED ON THE LEFT TEST WING. THE LOWER SKIN, 25 INCHES OUT-BOARD OF THE LANDING GEAR PCD, COMPLETELY FAILED FROM THE FRONT SPAR TO THE REAR SPAR, ALONG WITH ALL THREE LOWER SPAR CAPS AND THE UPPER FRONT SPAR CAP. THE INCIDENT OCCURRED DURING AN EXTENDED TEST PROGRAM OF 2.30 LIFETIMES (13,800 HRS).

SCOPE OF PROGRAM:

	PRICE		FY-81		FY-82		FY-83		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	41	6.1	38	4.1	92	5.5	92	6.1	421	33.8
NONRECURRING	2	1.5							2	1.5
KITS	39	2.5	28	2.3	92	5.5	92	6.1	419	28.4
DATA		.1								.1
TOOLING		2.0		1.8						3.8
TOTAL	41	6.1	38	4.1	92	5.5	92	6.1	421	33.8

METHOD OF IMPLEMENTATION: INSTALLATION - DIRECT  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: ECS COOLING CAPACITY, MN-103408

MODELS OF AIRCRAFT AFFECTED: A-10

DESCRIPTION/JUSTIFICATION: AS A RESULT OF NUMEROUS PILOT COMPLAINTS, SERVICE REPORTS AND HUMAN FACTORS TESTING AT DAVIS MONTHAN AFB, AN INCREASED COOLING CAPACITY FOR THE COCKPIT DURING GROUND OPERATIONS AND LOW LEVEL FLIGHT IS REQUIRED. A SECOND, IDENTICAL COOLING UNIT WILL BE ADDED. THE COCKPIT DUCTING WILL BE REVISED TO ALLOW SEPARATE COOLING OF COCKPIT ELECTRONICS AND THE AIRCREW BY THE SEPARATE COOLING UNITS. THIS CONFIGURATION IS CURRENTLY INSTALLED IN THE TWO PLACE AIRCRAFT.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	79	3.7	100	2.5	120	3.2	256	7.3	555	16.7		
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS												
DATA												
TRAINFR												
TOTAL	79	3.7	100	2.5	120	3.2	256	7.3	555	16.7		

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 14 MONTHS

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE  
 MODIFICATION TITLE AND NC: FLIGHT CONTROL CLEARANCE, MN-10342A  
 MODELS OF AIRCRAFT AFFECTED: A-10

DESCRIPTION/JUSTIFICATION: INTRUSION OF FOREIGN OBJECTS INTO THE FLIGHT CONTROL SYSTEM HAS BEEN ADDRESSED BY FCP F2771 AND F3055. BOTH ADDRESS CRITICAL AREAS IN THE COCKPIT AND WERE ORIGINATED IN FY79. HOWEVER, THROUGHOUT THE REMAINDER OF THE FUSELAGE, NUMEROUS FLIGHT CONTROLS HAVE CLEARANCES LESS THAN 1/4 OF AN INCH AND MANY CONTROL ROD CONNECTORS HAVE UPSIDE DOWN BOLTS. THIS LAST CONDITION VIOLATES FAILSAFE PROCEDURES IN THAT IF THE NUT & BOLT SEPARATE, THE BOLT WILL FALL OUT AND CAUSE LOSS OF CONTROL AND POSSIBLE JAMS.

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING						.5						.5
KITS			180	1.3	180	1.4	115	.9	475	3.6		
DATA						.1						.1
TRAINER						.2						.2
TOTAL			180	2.1	180	1.4	115	.9	475	4.4		

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DEPUTY CHIEF OF STAFF RESEARCH DEV AND ACQUISITION (A--ETC F/G S/L  
DEPARTMENT OF THE AIR FORCE JUSTIFICATION OF ESTIMATES FOR FISC--ETC(U)  
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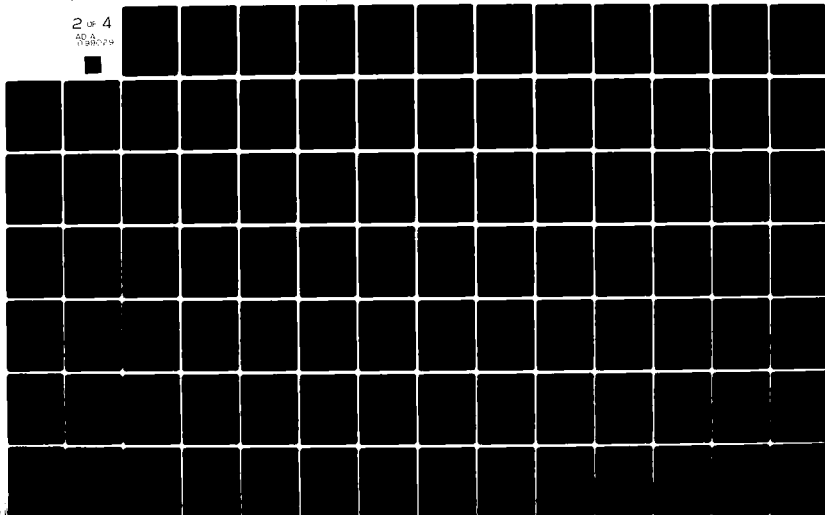
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MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: APU FUEL CONTROL, MN-103438

MODELS OF AIRCRAFT AFFECTED: A-10

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION IS A CHANGE FROM A LOW PRESSURE TO A HIGH PRESSURE FUEL SYSTEM. THE EXISTING LOW PRESSURE FUEL SYSTEM HAS EXHIBITED SEVERE IN-SERVICE RELIABILITY PROBLEMS RELATING TO DIAPHRAGM FAILURES, PUMP SHAFT FAILURES, GOVERNOR INSTABILITY AND AIR PUMP FAILURES. IN ADDITION TO ALLEVIATING THESE PROBLEMS BY NOT USING A DIAPHRAGM, THE HIGH PRESSURE SYSTEM WOULD PROVIDE IMPROVED TEMPERATURE CONTROL DURING START, ELIMINATE THE STARTER AIR PUMP ASSEMBLY, AND WILL PROVIDE A MORE CONSISTENT START TIME OVER A WIDER RANGE OF ALTITUDE AND TEMPERATURE THAN CURRENTLY AVAILABLE.

SCOPE OF PROGRAM:

QTY	COST	FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
		QTY	CCST	QTY	COST	QTY	CCST	QTY	COST	QTY	COST
238	2.3	238	2.3	300	2.3					538	4.6
238	2.3	238	2.3	300	2.3					538	4.6
238	2.3	238	2.3	300	2.3					538	4.6

BASIS FOR COST ESTIMATE:

KITS

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 24 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: FAN SHAFT/B SUMP FIX, MN-10344A

MODELS OF AIRCRAFT AFFECTED: A-10

DESCRIPTION/JUSTIFICATION: TWO FAN SHAFT FAILURES HAVE OCCURRED ON ENGINES DUE TO INTERNAL OIL FIRES, WITH THE OIL COMING FROM THE B SUMP. AT LEAST FOUR OTHER ENGINES ARE KNOWN TO HAVE OVERHEATED OIL & O-RINGS. A SAFETY OF FLIGHT ITEM.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	480	1.8			480	1.9	444	1.9			1404	5.6
KITS	480	1.7			480	1.9	444	1.9			1404	5.5
DATA		*										*
TOOLING		.1										.1
TOTAL	480	1.8			480	1.9	444	1.9			1404	5.6

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 9 MONTHS

\* LESS THAN \$ 50,000



MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE  
MODIFICATION TITLE AND NO: TURBINE ENGINE MONITORING SYSTEM, MN-10346C  
MODELS OF AIRCRAFT AFFECTED: A-10

DESCRIPTION/JUSTIFICATION: THE A-10 WAS DIRECTED TO STUDY THE FEASIBILITY OF INCORPORATING A  
TURBINE ENGINE MONITORING SYSTEM ON THE TF34 ENGINE. ANTICIPATED BENEFITS WOULD INCLUDE  
INCREASED AVAILABILITY AND MAINTENANCE EFFICIENCY, INCREASED DATA HANDLING EFFICIENCY, REDUCED  
LOGISTICS SUPPORT COST, AND IMPROVED ENGINE MANAGEMENT. THE T-38 ENGINE HEALTH MONITORING  
SYSTEM HAS BEEN MODIFIED FOR TF34 USAGE.

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE:

NONRECURRING, KITS DATA TRAINING SUPPORT EQUIP. TOOLING TOTAL	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	50	15.8	568	128.4	618	144.2
							50	7.3	568	113.4	618	120.7
								.5				.5
								2.5		7.5		10.0
								2.5		7.5		10.0
								2.0				2.0
	---	---	---	---	---	---	50	15.8	568	128.4	618	144.2

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: BOARDING LADDER IMPROVEMENT, MN-30102A

MODELS OF AIRCRAFT AFFECTED: A-10

DESCRIPTION/JUSTIFICATION: DURING NORMAL OPERATION OF THE AIRCRAFT BOARDING LADDER, IT IS ACTIVATED AND FALLS TO ITS OPERATING POSITION. THE FALLING SHOCK AND ALSO NORMAL USE IS CAUSING CRACKS AND SUBSEQUENT BREAKING OF THE LOWER STEP. THE CONTRACTOR HAS PROPOSED TO DEVELOP HIGHER STRENGTH FORGINGS WHICH WILL REINFORCE THE ROOT AREA OF THE STEP. RETROFIT IS REQUIRED TO ELIMINATE THE POSSIBILITY OF INJURY OF PERSONNEL STEPPING ON A CRACKED RUNG.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
BASIS FOR COST ESTIMATE:					524	2.1			524	2.1
NONRECURRING						.1				.1
KITS					524	1.9			524	1.9
DATA						.1				.1
TOTAL					524	2.1			524	2.1

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: IMPROVED IR SENSOR, AAD-5, MN-2871

MODELS OF AIRCRAFT AFFECTED: RF-4

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION PROCURES ADDITIONAL AAD-5 INFRARED SENSORS. THE AIRCRAFT WIRING INSTALLATION WAS PREVIOUSLY ACCOMPLISHED ON ALL RF-4C AIRCRAFT. THE SENSORS WERE PROCURED FOR ONLY 50% OF THE INVENTORY. THIS PROCUREMENT PROVIDES ENOUGH ADDITIONAL SENSORS FOR ALL OPERATIONAL ACTIVE AIRCRAFT.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST
BASIS FOR COST ESTIMATE:			21	9.7	34	16.0	48	24.2			103	49.9
KITS			21	9.7	34	16.0	48	24.2			103	49.9
TOTAL			21	9.7	34	16.0	48	24.2			103	49.9

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: VINSCN TAC SECURE VOICE, MN-3025

MODELS OF AIRCRAFT AFFECTED: F/RP-4

DESCRIPTION/JUSTIFICATION: VINSCN SECURE VOICE PROVIDES ON-LINE ENCRYPTION/DECRYPTION OF VHF/UHF AM/FM HALF-DUPLEX RADIO FOR ALL CLASSIFICATION OF TRAFFIC. THE TSEC/KY-58 IS DESIGNED FOR OPERATION IN AIRCRAFT INSTRUMENT PANELS OR RADIO-CONSOLE CONTROL PANELS, OR IT MAY BE LOCATED IN EQUIPMENT BAYS AND OPERATED BY A REMOTE CONTROL UNIT (RCU).

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS					5	1.3					5	1.3
DATA					412	2.9	420	2.7	885	8.0	1717	13.6
TRAINER						2.9						2.9
								.5				.5
TOTAL					417	7.1	420	3.2	885	8.0	1722	18.3

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCI/FIELD TEAM  
LEAD TIME - 16 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: ALR-69 RWR UPDATE (COMPASS TIE), MN-3052

MODELS OF AIRCRAFT AFFECTED: F-4E

DESCRIPTION/JUSTIFICATION: UPGRADES THE ALR-46 RADAR WARNING RECEIVER (RWR) TO PROVIDE AN IMPROVED CAPABILITY TO DETECT

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	13	10.5	90	25.5	130	37.1	279	73.0	512	146.1		
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS	13	3.7	90	20.1	130	31.1	279	73.0	512	127.9		
DATA		1.0								1.0		
SUPPORT EQUIP.		4.8		5.4		6.0				16.2		
TOTAL	13	10.5	90	25.5	130	37.1	279	73.0	512	146.1		

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 29 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: PARKHILL TAC SECURE VOICE, MN-3063

MODELS OF AIRCRAFT AFFECTED: RF-4

DESCRIPTION/JUSTIFICATION: PARKHILL SECURE VOICE PROVIDES ON-LINE ENCRYPTION/DECRYPTION OF HF NARROW BAND FREQUENCY RANGES UP TO THE SECRET LEVEL. THE TSEC/KY-75 IS DESIGNED FOR OPERATION IN ALL AIRCRAFT APPLICATIONS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING					1	2.0					1	2.0
KITS					71	1.4	64	1.3	204	4.7	339	7.4
DATA						1.2						1.2
TRAINER						.1						.1
TOTAL			72	4.7	72	4.7	64	1.3	204	4.7	340	10.7

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT  
LEAD TIME - 16 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: GBU-15

MODELS OF AIRCRAFT AFFECTED: F-4E

DESCRIPTION/JUSTIFICATION: PROVIDES CAPABILITY FOR GBU-15 CARRIAGE. GBU-15 GIVES THE F-4 AN ENHANCED STANDOFF CAPABILITY AGAINST SEVERAL TYPES OF TARGETS. INSTALLATION PROVISIONS WERE PROVIDED UNDER A PREVIOUS MODIFICATION (DIGITAL AVIONICS). THIS PROGRAM PROVIDES THE ADDED EQUIPMENT (RADAR CONTROL HANDLE AND PYLON DATA LINK PROVISIONS) NEEDED TO UTILIZE THE WEAPON.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
KITS					173	7.5					173	7.5
DATA					173	6.2					173	6.2
SUPPORT EQUIP.						1.0						1.0
						.3						.3
TOTAL					173	7.5					173	7.5

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 9 MONTHS

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FY-82 APPROPRIATION: AIRCRAFT PURCHASEMENT, AIR FORCE  
MODIFICATION TITLE AND NO: REWORK OUTER WING, MN-10510A  
MODELS OF AIRCRAFT AFFECTED: F-4

DESCRIPTION/JUSTIFICATION: REWORK THE OUTER WING TO BEEF-UP AREAS WHERE FATIGUE CRACKS HAVE OCCURRED. REPLACE OUTER WING SKIN AND STRUCTURAL COMPONENTS ON F-4C, D AND RF-4C UNSLATTED AIRCRAFT. THIS IS TO PREVENT LOSS OF OUTER WING FROM FATIGUE FAILURE OF OUTER WING COMPONENTS.

## SCCPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS					1	.6					1	.6
DATA					176	2.5					1093	20.0
TOOLING						.1						.1
						.4						.4
TOTAL					177	3.6					1094	21.1

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: GAS ACTUATED ROCKET MOTOR, MN-19212A

MODELS OF AIRCRAFT AFFECTED: F-4

DESCRIPTION/JUSTIFICATION: THE ROCKET MOTOR IS PRESENTLY FIRED BY A MECHANICAL FIRING LANYARD CABLE ATTACHED TO COCKPIT FLOOR AND ROCKET MOTOR FIRING MECHANISM. THIS HAS RESULTED IN NUMEROUS MAINTENANCE ACCIDENTS DUE TO LANYARD ENTANGLEMENT OR SNAGGING DURING SEAT REMOVAL. IN ADDITION, ENTANGLEMENT COULD OCCUR DURING SEAT INSTALLATION HAMPERING EJECTION SEQUENCE EVENTS. BASED ON THE ABOVE, A SAFER AND MORE POSITIVE METHOD FOR FIRING THE ROCKET MOTOR IS NEEDED. WITH INSTALLATION OF A GAS ACTUATED ROCKET MOTOR, THE PRESENT FIRING LANYARD WOULD BE REMOVED, ELIMINATING THE POTENTIAL FOR ENTANGLEMENT AND EJECTION SEQUENCING PROBLEMS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:					474	2.6	1180	7.6			1654	10.2
KITS					474	2.3	1180	7.6			1654	9.9
DATA						.2						.2
TRAINER						.1						.1
TOTAL					474	2.6	1180	7.6			1654	10.2

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 13 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: INERTIAL NAVIGATION SYSTEM, MN-195018

MODELS OF AIRCRAFT AFFECTED: F-4G

DESCRIPTION/JUSTIFICATION: THE OPERATIONAL READINESS OF THE F-4G IS DEGRADED BY LOW RELIABILITY OF THE PRESENT INERTIAL NAVIGATION ATTACK SYSTEM. REPLACEMENT OF THE INERTIAL NAVIGATION AND WEAPON DELIVERY SYSTEM WILL ENHANCE OPERATIONAL CAPABILITIES THROUGH INCREASED RELIABILITY AND MAINTAINABILITY RESULTING IN INCREASED WEAPON SYSTEM AVAILABILITY.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	CCST	QTY	COST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:			2	19.1		11.2	23	14.5	77	61.0	102	105.8
NONRECURRING			1	14.6			23	14.5	77	55.8	1	14.6
KITS			1	.3							101	70.6
DATA				4.2						5.2		4.2
TRAINER						11.2						5.2
SUPPORT EQUIP.												11.2
TOTAL			2	19.1		11.2	23	14.5	77	61.0	102	105.8

METHOD OF IMPLEMENTATION: INSTALLATION - DEPTC  
LEAD TIME - 16 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: LOW ALTITUDE WARNING SYSTEM, MN-50045A

MODELS OF AIRCRAFT AFFECTED: F-4

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION PROVIDES A VOICE SYNTHESIZER INTERFACED WITH THE EXISTING RADAR ALTIMETER AND INTERCOMMUNICATIONS SUBSYSTEM, WHICH WILL WARN OF FLIGHT WHICH IS DANGEROUSLY CLOSE TO THE GROUND. SAFETY CENTER STUDIES SHOW THAT TWO TO FOUR F/RF-4 AIRCRAFT CAN BE SAVED YEARLY BY INSTALLATION OF THIS SYSTEM.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					1655	4.3					1655	4.3
NONRECURRING					1	.4					1	.4
KITS					1654	3.6					1654	3.6
DATA						.3						.3
SUPPORT EQUIP.						*						*
TOTAL					1655	4.3					1655	4.3

BASIS FOR COST ESTIMATE:

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 8 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: REPLACE FIRE/OVERHEAT ELEMENTS, MN-59147A

MODELS OF AIRCRAFT AFFECTED: F/RF-4

DESCRIPTION/JUSTIFICATION: REPLACES THE PRESENT FENWAL ENGINE BAY FIRE/OVERHEAT ELECTRICAL SENSING ELEMENTS WITH SYSTRON-DONNER PNEUMATIC TYPE SENSING ELEMENTS. PRESENT CONTROL AND AIRCRAFT WIRING TO ENGINE BAY WILL BE UTILIZED. PRESENT SYSTEM GIVES A HIGH RATE OF FALSE FIRE/OVERHEAT INDICATION.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	COST	QTY	COST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	800	7.1			960	7.9					1760	15.0
NONRECURRING		*										*
KITS	800	7.0			960	7.9					1760	14.9
DATA		*										*
TRAINER		.1										.1
TOTAL	800	7.1			960	7.9					1760	15.0

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 9 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: REDESIGN DORSAL LONGERON, MN-29153A

MODELS OF AIRCRAFT AFFECTED: F-5E/F AIRCRAFT

DESCRIPTION/JUSTIFICATION: THE RECENTLY COMPLETED DAMAGE TOLERANCE ANALYSIS FOR THE F-5E/F IDENTIFIED THE DORSAL LONGERON SAFE SERVICE LIFE TO BE 1400 HOURS IN THE DISSIMILAR AIR COMBAT TRAINING (DACT) ROLE AND CONFIRMED THAT PRESENT LONGERON DESIGN PRECLUDES DEVELOPMENT OF ADEQUATE INSPECTION TECHNIQUES TO ASSURE SAFE STRUCTURAL STATUS. THIS MODIFICATION REPLACES THE EXISTING EXTRUDED LONGERON WITH A SIMPLE MACHINEC ANGLE AND FORMED PLATE CONFIGURATION. THIS CONFIGURATION WILL PROVIDE A SAFE SERVICE LIFE, REDUCE LEAD TIME OF HARDWARE, AND CAN BE FULLY INSPECTED WITHOUT DISASSEMBLY WITH CURRENT NDI PROCEDURES.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS	1	1.4									1	1.4
DATA	4	.2	33	2.0	36	2.4	28	2.0			101	6.6
		.3										.3
TOTAL	5	1.9	33	2.0	36	2.4	28	2.0			102	8.3

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT  
LEAD TIME - 16 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: ALR-56 RWR UPDATE, MN-3010

MODELS OF AIRCRAFT AFFECTED: F-15

DESCRIPTION/JUSTIFICATION: THE CURRENT ALR-56 WAS DESIGNED TO THE RADAR THREAT ENVIRONMENT AS IT EXISTED AT THE TIME THE HARDWARE WAS DESIGNED. THE TREMENDOUS THREAT PROLIFERATION EXPERIENCED SINCE THEN HAS CAUSED THE EQUIPMENT TO BECOME OPERATIONALLY DEFICIENT. THIS WILL UPDATE THE ALR-56 RADAR WARNING RECEIVER TO THE CURRENT THREAT.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
197	6.0	312	6.4	131	2.9						640	15.3
BASIS FOR COST ESTIMATE:												
NONRECURRING	1	1.2									1	1.2
KITS	196	3.0	312	6.4	131	2.9					639	12.3
SUPPORT EQUIP.		.8										.8
TOOLING		1.0										1.0
TOTAL	197	6.0	312	6.4	131	2.9					640	15.3

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT/FIELD TEAM  
LEAD TIME - 15 MONTHS

# MODIFICATION OF AIRCRAFT FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: UHF/VHF RADIOS/TACAN, MN-61U001

MODELS OF AIRCRAFT AFFECTED: F-15

DESCRIPTION/JUSTIFICATION: UPDATED UHF/VHF/TACAN COMMUNICATIONS EQUIPMENT AND VINSON TACTICAL SECURE VOICE EQUIPMENT ARE BEING INSTALLED ON THE PRODUCTION LINE FOR THE F-15C/D AIRCRAFT. THIS MODIFICATION IS REQUIRED TO STANDARDIZE THE F-15 AIRCRAFT. THE F-15 INTEGRATED COMMUNICATIONS CONTROL PANEL (ICCP) MAKES ACCOMPLISHING ALL COMMUNICATION MODIFICATIONS AT ONE TIME MANDATORY.

## SCOPE OF PROGRAM:

## BASIS FOR COST ESTIMATE:

NONRECURRING  
KITS  
TRAINING

PRGR	FY-81		FY-82		FY-83		OCTYFAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	103	5.7	195	15.0	212	16.7	109	8.4	619	49.8
	103	2.0	195	14.4	212	16.7	109	8.4	619	47.1
		.1								.1
	103	5.7	195	15.0	212	16.7	109	8.4	619	49.8

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 21 MONTHS



MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: UPDATE MODIFICATIONS

MODELS OF AIRCRAFT AFFECTED: F/TF-15

DESCRIPTION/JUSTIFICATION: AIRCRAFT REQUIRE UPDATES TO CORRECT DEFICIENCIES REVEALED DURING DEVELOPMENT AND INITIAL OPERATIONAL USE. CORRECTIONS ARE INCORPORATED IN PRODUCTION AT THE EARLIEST TIME. UPDATE MODS ARE REQUIRED TO MAINTAIN CONFIGURATION CONTROL OF DELIVERED AIRCRAFT AND THOSE TOO FAR INTO PRODUCTION FOR INCORPORATION. THE REQUIREMENTS LISTED ARE KNOWN PROBLEMS AND ARE REPRESENTATIVE OF THE TOTAL MODIFICATION ANTICIPATED.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	COST	QTY	CCST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	---	177.2	---	62.0	---	26.3	---	58.6	---	62.2	---	386.3
OTHER	---	177.2	---	62.0	---	26.3	---	58.6	---	62.2	---	386.3
TOTAL	---	177.2	---	62.0	---	26.3	---	58.6	---	62.2	---	386.3

F-15 REPRESENTATIVE UPDATE MODIFICATIONS  
BELLCRANK BALL BEARINGS

BEARING LIFE HAS BEEN ESTABLISHED AT APPROXIMATELY 500 HOURS. AS A RESULT, ALL SERVICE ENGINES MUST BE INSPECTED AT OR BEFORE 500 HOUR INTERVALS TO PREVENT BEARING FAILURE AND SUBSEQUENT NOZZLE MECHANISM DAMAGE. THE MEAN-TIME-BETWEEN-REMOVALS OF THIS PART IS 150 HOURS BASED ON CY1979 SUPPORT REQUIREMENTS AND PROJECTED FLIGHT HOURS. THE DISTRESS MODE IS CARBON CRACKING AND SUBSEQUENT MATERIAL DETERIORATION. THIS MODIFICATION PROVIDES FOR INCORPORATION OF A PREVIOUSLY DESIGNED METALLIC BALL BEARING.

FUEL NOZZLE IMPROVEMENTS

THIS MODIFICATION PROVIDES FOR A FUEL NOZZLE WITH A REVISED TIP TO IMPROVE THE FUEL SPRAY PATTERN AND THEREBY REDUCED PATTERN FACTOR. HIGH PATTERN FACTORS ARE CAUSED BY POOR FUEL/AIR DISTRIBUTION, AND RESULTS IN BURNING/CRACKING OF TURBINE VANES.

IMPROVED EXHAUST NOZZLE CONTROL ROTOR BEARING

THE AIR ROTOR BEARINGS CAN WEAR EXCESSIVELY AND ALLOW THE ROTORS TO SHIFT AXIALLY ENOUGH TO RUB ON THE BEARING HOUSINGS, IMPAIRING NOZZLE MOVEMENT, CAUSING AUGMENTOR ANOMALIES AND ENGINE STAGNATIONS. THIS MODIFICATION IS DESIGNED TO IMPROVE THE DURABILITY OF THE ROTOR BEARINGS AND RESULT IN IMPROVEMENTS IN ENGINE RELIABILITY.

IMPROVED COMPRESSOR INLET VARI-VANE

SEVERE WEAR BETWEEN THE FLAP VANE ARM AND THE RING POCKET CAUSES THE VANE ARM TO BECOME DISENGAGED, REQUIRING REMOVAL OF THE ENGINE TO REPLACE THE 1st STAGE BLADES. THE NEW RING INCORPORATES UNIBALL BEARING BETWEEN VANE ARM AND RING THUS ELIMINATING THE POCKET WEAR.

IMPROVED MAIN FUEL PUMP LIFE

TWO MAIN FUEL PUMP VANE STAGE FAILURES ATTRIBUTED TO INGESTION OF FOREIGN OBJECTS HAVE BEEN IDENTIFIED. MAIN FUEL PUMPS RETURNED FOR OVERHAUL HAVE DISPLAYED EXCESSIVE WEAR IN THE FOLLOWING AREAS: (1) SPEED SENSOR DRIVE GEAR BUSHINGS; (2) CAM RING TO FRAME INTERFACE; (3) WASH FILTER/WASH FILTER RETAINER; (4) MAIN DRIVE SHAFT/ROTOR SHAFT SPLINE INTERFACE; (5) CAM FOLLOWERS. CORRECTIVE ACTIONS ARE BEING DEVELOPED UNDER THE F100 ENGINE COMPONENT IMPROVEMENT PROGRAM.

MISSILE LAUNCHER UPDATE

INTEGRATION OF THE AIM-9L MISSILE INTO THE F-15 WEAPONS INVENTORY NECESSITATED DEVELOPMENT OF A NEW RAIL LAUNCHER WHICH WOULD PROVIDE FOR AIM-9J AND L MISSILE EMPLOYMENTS, REQUIRING AN ELONGATED NOSE NEEDED TO HOUSE THE AIM-9J ELECTRICAL ADAPTER PLUG. THE NOSE COVER HINGE WAS REDESIGNED; HOWEVER, THE FAILURE POINT HAS PROPAGATED THROUGH THE STRUCTURE THUS REQUIRING REPLACEMENT OF SEVERAL ACCESSORY COMPONENTS AND REPLACEMENT OF THE FORWARD FRAME SUPPORT (REDESIGN AND CHANGE IN MATERIAL).

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: SEEK TALK

MODELS OF AIRCRAFT AFFECTED: F-16

DESCRIPTION/JUSTIFICATION:

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE:

NONRECURRING  
KITS  
TRAINER  
DATA  
SUPPORT EQUIP.

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPUT  
LEAD TIME - 12 MONTHS

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
							9.1			103.4		112.5
							8.3			86.8		86.8
										11.3		11.3
							.8			.8		.8
										5.3		5.3
	---	---	---	---	---	---	---	---	---	---	---	---
							9.1			103.4		112.5

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: UPDATE MODIFICATIONS

MODELS OF AIRCRAFT AFFECTED: F-16

DESCRIPTION/JUSTIFICATION: AIRCRAFT REQUIRE MCDS TO CORRECT DEFICIENCIES REVEALED DURING DEVELOPMENT AND INITIAL USE. CORRECTIONS ARE INCORPORATED IN PRODUCTION AT THE EARLIEST TIME. UPDATE MCDS ARE REQUIRED TO MAINTAIN CONFIGURATION CONTROL OF DELIVERED AIRCRAFT AND THOSE TOO FAR INTO PRODUCTION FOR INCORPORATION. REQUIREMENTS LISTED ARE KNOWN PROBLEMS AND ARE REPRESENTATIVE OF THE TOTAL MODIFICATIONS ANTICIPATED.

SCOPE OF PROGRAM:

PRIOR	FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	45.2		40.0	60.0		60.0		210.0		415.2
	45.2		40.0	60.0		60.0		210.0		415.2
	45.2		40.0	60.0		60.0		210.0		415.2

BASIS FOR COST ESTIMATE:

OTHER

TOTAL

## F-16 REPRESENTATIVE UPDATE MODIFICATIONS

### DEPARTURE WARNING SYSTEM

INSTALL AN AURAL TONE WARNING SYSTEM TO ALERT THE PILOT WHEN HE IS ENTERING FLIGHT CONDITIONS WHICH COULD RESULT IN THE AIRCRAFT DEPARTING CONTROLLED FLIGHT AND POSSIBLE SPIN OR AIRCRAFT LOSS.

### ENGINE RELATED MODIFICATIONS

A SUBSTANTIAL NUMBER OF CHANGES TO THE ENGINE WILL BE ACCOMPLISHED TO REDUCE SUSCEPTABILITY TO STALL/STAGNATION, IMPROVE RELIABILITY AND REDUCE FAILURES.

### PRECHECK REFUEL VALVES

INCORPORATE A PRECHECK REFUEL VALVE IN THE FUEL SYSTEM TO MINIMIZE RISK OF FUEL SPILLS. CHANGE WILL ALLOW SAFE REFUELING DURING QUICK TURNAROUND OPERATIONS WITH THE ENGINE RUNNING.

### PILOT LIMB RESTRAINT SYSTEM

ADD AN ARM AND LEG RESTRAINT SYSTEM TO THE EJECTION SEAT WHICH WOULD BE ACTIVATED AUTOMATICALLY DURING AN EJECTION. CHANGE WILL REDUCE FLAILING INJURIES DURING HIGH SPEED EJECTION.

### NUCLEAR BIOLOGICAL CHEMICAL (NBC) PROTECTIVE SYSTEM

MODIFY OXYGEN REGULATOR, COCKPIT CIRCUITRY, AIRCRAFT WIRING AND STRUCTURE TO PROVIDE NBC PROVISIONS IN THE LIFE SUPPORT SYSTEM.

### ON-BOARD OXYGEN GENERATING SYSTEM (OBOGS)

REPLACE THE PRESENT LIQUID OXYGEN (LOX) SYSTEM WITH AN OBOGS TO DECREASE LIFE CYCLE COSTS BY ELIMINATING THE REQUIREMENT FOR LOX SUPPLIES AND SUPPORT EQUIPMENT AND TO INCREASE OPERATIONAL READINESS BY ELIMINATING THE TIME REQUIRED TO SERVICE THE LOX SYSTEM.

### BRAKE CONTROL SYSTEM REDESIGN

MODIFY THE BRAKE CONTROL SYSTEM TO PROVIDE METERED BRAKING FOR TOWING, REPLACEMENT OF THE PARKING BRAKE VALVE AND ADDITION OF A COCKPIT SWITCH. CHANGE WILL REDUCE BRAKE FIRES, LOCKED BRAKES AND PARKING BRAKE LIMITATIONS.

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: SECURE VOICE, MN-3070

MODELS OF AIRCRAFT AFFECTED: F-111A/D/E/F

DESCRIPTION/JUSTIFICATION: TO PROVIDE TACTICAL SECURE VOICE ENCRYPTION CAPABILITY FOR HF AND UHF COMMUNICATIONS.

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE:

NONRECURRING

KITS

DATA

TRAINER

TOTAL

PRIOR QTY	FY-81 QTY	FY-81 COST	FY-82 QTY	FY-82 COST	FY-83 QTY	FY-83 COST	OULTYEAR QTY	OULTYEAR COST	TOTAL	
									QTY	COST
	2	1.5	90	2.7	86	2.8	141	4.5	319	11.5
	2	1.4	90	2.6	86	2.6	141	4.5	317	10.4
		.1		.1		.2		*		.1
										.3
	2	1.5	90	2.7	86	2.8	141	4.5	319	11.5

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: SIGNAL DATA CONVERTER (SCC), MN-103098

MODELS OF AIRCRAFT AFFECTED: F-111D

DESCRIPTION/JUSTIFICATION: APQ-130 SOC FAILURES ARE PRIMARILY DUE TO USE OF CUSTOM BUILT MICROELECTRONIC CIRCUITS (83 EA) AND METAL OXIDE SEMICONDUCTOR FIELD EFFECT TRANSISTORS (MOSFET) DEVICES (216 EA). MICROELECTRONIC CIRCUITS ARE DIFFICULT TO REPAIR AND REPAIR BY THE SOLE SOURCE VENDOR IS COSTLY. THIS MODIFICATION WILL REMOVE ALL MICROELECTRONIC CIRCUITS AND MOSFET DEVICES. THE QUANTITY OF SRUS WILL BE REDUCED FROM 31 TO 6; PARTS COUNT FROM 4989 TO 481; AND INTERCONNECTS FROM 11160 TO 2160. MEAN TIME BETWEEN FAILURE WILL INCREASE FROM 176 TO 1108 HOURS.

SCOPE OF PROGRAM:

	FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
NONRECURRING			1	1.5			85	2.8	1	1.5
KITS									85	2.8
DATA				.9						.9
SUPPORT EQUIP.				.7						.7
TOTAL			1	3.1			85	2.8	86	5.9

BASIS FOR COST ESTIMATE:

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR  
LEAD TIME - 29 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: RADAR RECEIVER IMPROVEMENT, MN-103108

MODELS OF AIRCRAFT AFFECTED: F-111D

DESCRIPTION/JUSTIFICATION: APQ-130 RADAR RECEIVER FAILURES ARE PRIMARILY DUE TO USE OF CUSTOM BUILT MICROELECTRONIC CIRCUITS. THEY ARE DIFFICULT TO REPAIR AND REPAIR BY THE SOLE SOURCE VENDOR IS COSTLY. THIS MODIFICATION WILL REMOVE ALL MICROELECTRONIC CIRCUITS FROM THE RADAR RECEIVER. ONE SRU WILL BE MODIFIED TO ELIMINATE FAILURE MODES AND 9 SRUS (6 SRU TYPES) WILL BE REPLACED. MEAN TIME BETWEEN FAILURE WILL INCREASE FROM 75 TO 338 HOURS.

SCOPE OF PROGRAM:

	PRICE		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS					1	1.1			85	2.8	1	1.1
DATA						.6					85	2.8
SUPPORT EQUIP.						.6						.6
TOTAL					1	2.3			85	2.8	86	5.1

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR  
LEAD TIME - 27 MONTHS



MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: REPLACE CONVERTER MULTIPLEXER, MN-163C8B

MODELS OF AIRCRAFT AFFECTED: FB/F-111 D/F

DESCRIPTION/JUSTIFICATION: THIS NEW CONVERTER MULTIPLEXER HAS BEEN DESIGNED WITH CURRENT STATE-OF-THE-ART ELECTRONICS. A WIRE-WAPPED MOTHER BOARD REPLACES THE OLD FLEXPRINT CABLE AND HOUSING ASSEMBLY. HIGH DENSITY PACKAGING HAS REDUCED THE CARD COUNT FROM 60 TO 17 AND PARTS FROM 7000 TO 3600. THE UNIT IS BUILT TO THE ORIGINAL CONVERTER SPECIFICATION AND IS COMPLETELY INTERCHANGEABLE WITH THE PRESENT CONVERTER. MEAN TIME BETWEEN FAILURE SHOULD IMPROVE FROM 28 HOURS TO 383 HOURS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	93	18.6	57	18.4	63	11.6					253	48.6
NONRECURRING	6	5.2		1.5							6	6.7
KITS	87	8.9	97	11.6	63	8.0					247	28.5
DATA		2.2		2.0								4.2
TRAINER		.3		.2								.5
SUPPORT EQUIP.		2.0		3.1		3.6						8.7
TOTAL	93	18.6	97	18.4	63	11.6					253	48.6

METHOD OF IMPLEMENTATION: INSTALLATION - ORG/FIELD  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: REDESIGN ELECTRONIC PROCESSOR UNIT (EPU), MN-18317C

MODELS OF AIRCRAFT AFFECTED: F-111

DESCRIPTION/JUSTIFICATION: THE EPU CONSISTS OF 32 CIRCUIT BOARDS CONTAINING 275 MICROCIRCUITS AND A TOTAL OF 7715 PIECE PARTS. REDESIGN WOULD REPLACE THE MICROCIRCUITS WITH OFF-THE-SHELF SOLID STATE DEVICES; REDUCE NUMBER OF CARDS TO 20; AND REDUCE TOTAL PARTS COUNT TO 1200. ALSO, A NEW BUILT-IN TEST CAPABILITY WILL BE INCORPORATED TO PROVIDE IMPROVED FLIGHT LINE ISOLATION TO ALL APQ-130 LRU'S AND REDUCE REMOVAL RATE.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST
RASIS FOR COST ESTIMATE:			1	3.8		2.0	85	9.9			86	15.7
NONRECURRING			1	2.3							1	2.3
KITS							85	8.9			85	8.9
DATA				1.5								1.5
SUPPORT EQUIP.						2.0		1.0				3.0
TOTAL			1	3.8		2.0	85	9.9			86	15.7

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR/FIELD TEAM(S)  
LEAD TIME - 35 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: INERTIAL REFERENCE UNIT, MN-28146B

MODELS OF AIRCRAFT AFFECTED: FB-111A, F-111C, F-111F

DESCRIPTION/JUSTIFICATION: INCREASING FAILURE TREND IN THE INERTIAL INSTRUMENTS RESULTED IN AN INVESTIGATION TO DETERMINE ACTIONS REQUIRED TO IMPROVE SYSTEM RELIABILITY. FAILURE PRONE COMPONENTS IN THE GYROSCOPE AND VELOCITY METER HAVE BEEN IDENTIFIED AS CAUSING APPROXIMATELY 60% OF TOTAL INSTRUMENT FAILURE. INSTRUMENTS CAUSE 52% OF TOTAL IRU REMOVALS. NUMEROUS TURN-ON/TURN-OFF CYCLES CAUSED BY OPERATIONAL REQUIREMENTS INDUCE PREMATURE GYRO FAILURE DUE TO LONG RUN-DOWN TIME OF THE GYRO FCICF. CURRENT MEAN TIME BETWEEN FAILURE (MTBF) IS 38 HRS. PROJECTED MTBF IS 169 HRS.

SCOPE OF PROGRAM:

PRIORITY	FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
	96	3.8	143	3.8					239	7.6
	3	.8							3	.8
	93	2.5	143	3.8					236	6.3
		.4								.4
		.1								.1
	96	3.8	143	3.8					239	7.6

BASIS FOR COST ESTIMATE:

NONRECURRING  
KITS  
DATA  
TRAINER

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/FIELD TEAM  
LEAD TIME - 7 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: WEAPONS/NAVIGATION COMPUTER, MN-193048

MODELS OF AIRCRAFT AFFECTED: F8/F-111D/F

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION WILL REPLACE THE EXISTING UNRELIABLE GENERAL PURPOSE COMPUTER WITH A NEW STATE OF THE ART COMPUTER TO INCREASE MEAN TIME BETWEEN FAILURE AND REDUCE LOGISTICS SUPPORT COST.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	---	---	---	---	---	---	---	---	---	---	---	---
NONRECURRING												
KITS	3	2.7									3	3.2
DATA							89	11.7	146	20.4	235	32.1
TRAINER								2.2				2.6
SUPPORT EQUIP.								.5				.5
								8.4				9.0
TOTAL	3	3.7					89	23.3	146	20.4	238	47.4

METHOD OF IMPLEMENTATION: INSTALLATION - ORG  
LEAD TIME - 14 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: EXTENDED INLET CASE, MN-46795B

MODELS OF AIRCRAFT AFFECTED: F-111F, IF-30, P100

DESCRIPTION/JUSTIFICATION: TWO INCH FORWARD MOVEMENT OF THE FAN INLET CASE REDUCES VANE RESONANCE AND ELIMINATES VANE AND CASE CRACKING. THE CURRENT CASE IS A SOURCE OF HIGH SUPPORT COST. AS CASES AGE THEY BECOME MORE SUSCEPTIBLE TO CRACKING.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	---	---	---	---	---	---	---	---	---	---	---	---
KITS	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
					86	3.1	174	6.2			260	9.3
					86	3.1	174	6.2			260	9.3
					86	3.1	174	6.2			260	9.3

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: REDESIGN COMPRESSOR DISK/HUB, MN-48835A

MODELS OF AIRCRAFT AFFECTED: F-111UTF-30 ENGINE)

DESCRIPTION/JUSTIFICATION: MODIFICATION PROVIDES A REDESIGN OF THE FIRST STAGE COMPRESSOR DISK TO ELIMINATE STRESS LEVELS THAT CONTRIBUTE TO COMPONENT FAILURE. THE NEED FOR REDESIGN WAS IDENTIFIED WHEN SIX DISKS IN AIR FORCE TF-30 ENGINES DEVELOPED CRACKS IN THE BLADE RETAINING SLOTS. SUBSEQUENT BODY CURRENT SAMPLING INSPECTION OF TWENTY-SEVEN DISKS IN THE REPAIR LINE REVEALED FIVE ADDITIONAL CRACKS. FAILURE OF THE BLADE RETAINING LUG WILL RELEASE A MINIMUM OF TWO COMPLETE FIRST STAGE FAN BLADES AND THE ENGINE CASE CANNOT CONTAIN A FAILURE OF THIS MAGNITUDE. THIS REDESIGN WAS INITIATED TO PRECLUDE FURTHER FAILURES OF THIS NATURE.

SCOPE OF PROGRAM:

QTY	COST	FY-81		FY-82		FY-83		ULTYEAR		TOTAL	
		QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
548	3.8	311	2.5	287	2.6					1146	8.9
548	3.9	311	2.5	287	2.6					1146	8.9
	*										*
548	3.8	311	2.5	287	2.6					1146	8.9

BASIS FOR COST ESTIMATE:

KITS  
DATA

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT  
LEAD TIME - 24 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: TACTICAL SUPPORT AIRCRAFT (EW), MN-3015

MODELS OF AIRCRAFT AFFECTED: EF-111A

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION

FORCES ON A WORLDWIDE BASIS IN PEACETIME.  
ELECTRONIC COUNTER COUNTERMEASURE TRAINING OF AIR DEFENSE

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST
NONRECURRING												
KITS	9	278.2	12	236.3	12	260.8	9	198.9		5.0	42	979.2
DATA												
TRAINER												
SUPPORT EQUIP.												
MID-BAND												
TOTAL	9	278.2	12	236.3	12	260.8	9	198.9			42	974.2

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR  
LEAD TIME - 12 MONTHS

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE  
MODIFICATION TITLE AND NO: COMMERCIAL WEATHER RADAR, MN-192018  
MODELS OF AIRCRAFT AFFECTED: C-5A

DESCRIPTION/JUSTIFICATION: REMOVES THE MIL-SPEC C-5 MULTI-MODE RADAR SYSTEM AND INSTALLS A COMMERCIAL TYPE WEATHER RADAR WITH COMPONENTS COMMON WITH THE C-141 RADAR. THE MULTI-MODE IS EXPERIENCING ABOUT 23 HOUR MEAN TIME BETWEEN FAILURE (MTBF) AND THE COMMERCIAL TYPE EQUIPMENT A MINIMUM OF 500 MTBF.

SCOPE OF PROGRAM:	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS			2	6.7	32	13.9	13	5.6	30	12.0	77	31.8
DATA				.3		1.0						1.0
TPAINER				.3								.3
SUPPORT EQUIP.				.2								.2
TOOLING				.1								.1
TOTAL			2	7.6	32	14.9	13	5.6	30	12.0	77	40.1

	6.7	32	13.9	13	5.6	30	12.0	77	31.8
NONRECURRING KITS	2	.3	1.0						1.0
DATA									.3
TPAINER		.3							.2
SUPPORT EQUIP.		.2							.1
TOOLING		.1							
TOTAL	2	7.6	32	14.9	13	5.6	30	12.0	40.1

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MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: VINSON TAC SECURE VOICE, MN-3025

MODELS OF AIRCRAFT AFFECTED: C-141

DESCRIPTION/JUSTIFICATION: TO PROVIDE KY-58 TO SECURE UHF/VHF VOICE COMMUNICATIONS. GROUP A TO SECURE 2 UHF AND 2 VHF RADIOS WILL BE PROVIDED IN DEPOT. GROUP B EQUIPMENT WILL BE INSTALLED BY THE OPERATING COMMAND. TRAINERS WILL BE MODIFIED TO REFLECT A/C CONFIGURATION. BASED ON HQ USAF ELECTRONIC SECURITY COMMAND REQUIRED OPERATIONAL CAPABILITY, ESC ROC 1-77, TACTICAL SECURE VOICE, 20 JUNE 1977, APPROVED BY HQ USAF ON 22 DECEMBER 1977. REQUIREMENTS BASED UPON MAJCOM CONCEPTS OF EMPLOYMENT AND/OR DIRECTED DOD CONSOLIDATED GUIDANCE.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
	---	---	---	---	---	---	---	---	---	---	---	---
			55	1.9	95	2.9	124	3.3			274	8.1
			1	.3							1	.3
			54	1.3	55	2.4	124	3.3			273	7.0
						.4						.4
				.3		.1						.4
			---	---	---	---	---	---	---	---	---	---
TOTAL			55	1.9	95	2.9	124	3.3			274	8.1

BASIS FOR CCST ESTIMATE:

NONRECURRING

KITS

DATA

TRAINER

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCY  
LEAD TIME - 9 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: JOINT CRISIS MANAGEMENT CAPABILITY

MODELS OF AIRCRAFT AFFECTED: C-141

DESCRIPTION/JUSTIFICATION: JCMC IS TO MEET THE THEATER CINCS NEEDS FOR AN IMPROVED, QUICK REACTION  
CRISIS MANAGEMENT CAPABILITY.

SCOPE OF PROGRAM:

PRIOR		FY-81		FY-82		FY-83		OULTYEAR		TOTAL	
QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
---	---	---	---	---	---	---	---	---	---	---	---
8	12.1	8	12.1	8	10.2	8	10.2	8	10.2	16	22.3
NONRECURRING											2.3
8	9.8	8	9.8	8	10.2	8	10.2	8	10.2	16	20.0
TOTAL											22.3
8	12.1	8	12.1	8	10.2	8	10.2	8	10.2	16	22.3

BASIS FOR COST ESTIMATE:

NONRECURRING  
KITS

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT  
LEAD TIME - 6 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: FUEL SAVINGS ADVISORY SYSTEM, MN-104028

MODELS OF AIRCRAFT AFFECTED: C-141

DESCRIPTION/JUSTIFICATION: INSTALLS AN OFF-THE-SHELF FUEL SAVINGS ADVISORY SYSTEM. DECLINING OIL RESERVES AND INCREASING FUEL COSTS DICTATE FUEL CONSERVATION TO THE MAXIMUM EXTENT POSSIBLE.

SCOPE OF PROGRAM:

PRICE	FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	61	7.1	209	21.5					270	28.6
BASIS FOR COST ESTIMATE:										
ACQUISITION	1	.6							1	.6
KITS	60	6.5	209	21.5					269	28.0
TOTAL	61	7.1	209	21.5					270	28.6

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/FIELD TEAM  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE  
MODIFICATION TITLE AND NO: REFURBISH FLT SIMULATOR, MN-10502R

MODELS OF AIRCRAFT AFFECTED: C-141

DESCRIPTION/JUSTIFICATION: PROVIDES A PROGRAMMABLE DIGITAL COMPUTER TO IMPROVE MAINTAINABILITY AND CURRENCY OF CONFIGURATION WITH THAT OF THE AIRCRAFT, WHILE BECOMING MORE LOGISTICALLY SUPPORTABLE. THESE SIMULATORS HAVE ACCUMULATED AN AVERAGE OF APPROX 90,000 TRAINING HOURS IN APPROX 13 YEARS OF USE. BASED ON CURRENT PROGRAMMING, THEY WILL BE USED FOR AN ADDITIONAL 20 YEARS, AND WILL ACCUMULATE AN ADDITIONAL 104,000 TRAINING HOURS.

SCOPE OF PROGRAM:

	PRICE		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
PASTS FOR COST ESTIMATE:	1	5.6			2	11.1	5	8.1			8	24.8
NONRECURRING	1	4.4			1	9.3					2	13.7
KITS					1	.8	5	6.9			6	7.7
DATA		1.2				1.0		.9				3.1
SUPPORT EQUIP.		*						.3				.3
TOTAL	1	5.6			2	11.1	5	8.1			8	24.8

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR  
LEAD TIME - 29 MONTHS

\* LESS THAN \$ 50,000

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE  
MODIFICATION TITLE AND NC: IMPROVED FLIGHT RECORDING SYSTEM, MN-19608A  
MODELS OF AIRCRAFT AFFECTED: C-141

DESCRIPTION/JUSTIFICATION: THE PRESENT SYSTEM RECORDS 4 PARAMETERS ON FOIL. HIGH FAILURE RATES, ALONG WITH NO MEANS OF VERIFYING PROPER RECORDING OF DATA AND THE LIMITED NUMBER OF PARAMETERS, REQUIRE AN IMPROVED SYSTEM TO PERMIT MORE COMPREHENSIVE INVESTIGATIONS. MOD INCLUDES: INSTALL OF A FLIGHT DATA ACQUISITION UNIT, AFT LOCATED RECORDER, AND COCKPIT VOICE RECORDER.

## SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OULYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS					1	2.1					1	2.1
DATA			123	5.6			82	4.1	68	3.4	273	13.1
TRAINER						.6						.6
SUPPORT EQUIP.						.1		.1				.2
						.3						.3
TOTAL			124	8.7	82	4.2	68	3.4	274	16.3		

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/FIELD TEAM  
LEAD TIME - 23 MONTHS

# MODIFICATION OF AIRCRAFT FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: FIRE/OVERHEAT DETECTION SYSTEM, MN-68C338

MODELS OF AIRCRAFT AFFECTED: C-141

DESCRIPTION/JUSTIFICATION: THE EXISTING SYSTEM HAS ENCOUNTERED NUMEROUS SENSING ELEMENT PROBLEMS WHICH ARE INHERENT TO AN ELECTRICAL TYPE SYSTEM, SUCH AS FALSE ALARMS, CAUSING ENGINE SHUTDOWNS, FIRE EXTINGUISHERS TO BE DISCHARGED, AND MISSION ABORTS. MOD ACCOMPLISHES: FALSE ALARMS WILL BE VIRTUALLY ELIMINATED AND SYSTEM LESS COSTLY TO MAINTAIN. THE PROPOSED GAS TYPE SYSTEM INCLUDES REPLACEMENT OF SENSING ELEMENTS, FLEXIBLE CABLES AND CONTROL BOXES. PRESENT SYSTEM AVERAGES 50 AIR ABORTS PER YEAR, EXPOSING CREWS AND PASSENGERS TO UNNECESSARY RISKS.

## SCOPE OF PROGRAM:

### BASIS FOR COST ESTIMATE:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
NONRECURRING	1	*									1	*
KITS	1	*			132	2.5	140	3.0			273	5.5
DATA		*										*
TPAINER						.1		.1				.2
TOTAL	2	*			132	2.6	140	3.1			274	5.7

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 20 MONTHS

\* LESS THAN \$ 50,000

# MODIFICATION OF AIRCRAFT FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: REPLACEMENT OF SINGLE AXIS RATE GYRO, MN-68073C

MODELS OF AIRCRAFT AFFECTED: C-141

DESCRIPTION/JUSTIFICATION: THE PRESENT SINGLE AXIS RATE GYRO IS EXPERIENCING MECHANICAL WEAROUT, RESULTING IN MISSION ABORTS, HIGH LOGISTIC SUPPORT COST AND MAINTENANCE MAN-HOURS. THE NEW RATE SENSOR ELIMINATES ALL MOVING PARTS AND GIVES AN INCREASED MEAN TIME BETWEEN FAILURE OF 37,000 HOURS. THIS MODIFICATION CONSISTS OF REPLACING THE SINGLE AXIS RATE GYRO WITH THE LATEST STATE-OF-THE-ART RATE SENSOR OF THE YAW DAMPER RUDDER CONTROL CIRCUIT. THIS MODIFICATION WILL AMORTIZE IN 3.2 YEARS WITH GREATLY REDUCED LOGISTICS SUPPORT AND INCREASED RELIABILITY.

## SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		O L T Y E A R		T O T A L	
	QTY	CCST	QTY	CCST	QTY	COST	QTY	CCST	QTY	COST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
					274	2.9					274	2.9
NONRECURRING												
KITS					1	.1			1	.1		
DATA					273	2.3			273	2.3		
TRAINER						.5				.5		
						*				*		
	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL					274	2.9			274	2.9		

## BASIS FOR COST ESTIMATE:

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 15 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: EJECTION SEAT SEQUENCE, MN-18203A

MODELS OF AIRCRAFT AFFECTED: T-38

DESCRIPTION/JUSTIFICATION: INSTALLS AN EJECTION INTERSEAT SEQUENCING SYSTEM THAT CAN BE INITIATED FROM EITHER SEAT POSITION, EJECTION SEAT DIVERGENCE, AN ALL GAS ACTUATED SEAT/MAN SEPARATION SYSTEM, AND A BALLISTIC POWERED INERTIAL FEEL. THIS MCD WILL INSURE CORRECT EJECTION POSTURE, WILL ELIMINATE SEAT/MAN SEPARATOR FIRING LANYARD ENTANGLEMENT OR PREMATURE ACTUATION AND PREVENT COLLISION OF EJECTED CREW MEMBERS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	1	.5	118	1.3	480	5.3	285	3.5			884	10.6
NONRECURRING	1	.5									1	.5
KITS			118	1.2	480	5.2	285	3.5			883	10.0
TRAINER			*								*	*
SUPPORT EQUIP.						*					*	*
TOOLING				.1								.1
TOTAL	1	.5	118	1.3	480	5.3	285	3.5			884	10.6

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/CONTRACTOR  
LEAD TIME - 18 MONTHS

\* LESS THAN \$ 50,000



# MODIFICATION OF AIRCRAFT FY-82 PROGRAM

FY-92 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: ALE-40 FLARE SYSTEM, MN-3004

MODELS OF AIRCRAFT AFFECTED: C-130E (SKE EQUIPPED)

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION INSTALLS AN ALE-40 FLARE LAUNCH SYSTEM WHICH WILL PROVIDE A MEASURE OF PROTECTION FROM ENEMY LAUNCHED SAMs WITH IR SEEKERS.

## SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	4	.2			17	1.7	164	4.5	159	6.5	344	12.9
NONRECURRING	4	.2									4	.2
KITS					17	.7	164	4.5	159	6.5	340	11.7
DATA		*										*
SUPPORT EQUIP.		*				1.0						1.0
TOTAL	4	.2			17	1.7	164	4.5	159	6.5	344	12.9

METHOD OF IMPLEMENTATION: INSTALLATION - DEPLY  
LEAD TIME - 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: VINSON TAC SECURE VOICE, MN-3025

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION: TO PROVIDE TACTICAL SECURE VOICE FOR UHF/VHF. BASED ON HQ USAF  
ELECTRONIC SECURITY COMMAND REQUIRED OPERATIONAL CAPABILITY, ESC ROC 1-77, TACTICAL SECURE  
VOICE, 20 JUNE 1977, APPROVED BY HQ USAF CN 22 DECEMBER 1977. REQUIREMENTS BASED UPON MAJCOM  
CONCEPTS OF EMPLOYMENT AND/OR DIRECTED DOD CONSOLIDATED GUIDANCE.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
BASIS FOR COST ESTIMATE:					51	2.0	216	7.7	416	8.4	683	18.1
NONRECURRING												
KITS					11	.6					11	.6
DATA					40	1.2	216	4.1	416	8.4	672	13.7
TRAINER						.2						.2
SC-15 CAPSULE(3080)								.8				.8
								2.8				2.8
TOTAL					51	2.0	216	7.7	416	8.4	683	18.1

METHOD OF IMPLEMENTATION: INSTALLATION - DEFECT/CONTRACTOR  
LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: PARKHILL TAC SECURE VOICE, MN-3063

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION: TO PROVIDE TACTICAL SECURE VOICE FOR FF. BASED ON HQ USAF ELECTRONIC SECURITY COMMAND REQUIRED OPERATIONAL CAPABILITY, ESC RDC 1-77, TACTICAL SECURE VOICE, 20 JUNE 1977, APPROVED BY HQ USAF ON 22 DECEMBER 1977. REQUIREMENTS BASED UPON MAJCOM CONCEPTS OF EMPLOYMENT AND/OR DIRECTED DCD CONSOLIDATED GUIDANCE.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST
	---	---	---	---	---	---	---	---	---	---	---	---
	51	2.6	216	6.3	416	11.1					683	20.0
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS	11	.6									11	.6
DATA	40	1.8	216	5.5	416	11.1					672	18.4
TRAINER		.2		.8								.2
												.8
TOTAL	51	2.6	216	6.3	416	11.1					683	20.0

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT/CONTRACTOR  
LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: INSTALLATION OF FLIGHT DATA RECORDER, MA-10603A

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION: FOUR C-130 MISHAPS DURING 1978, EACH INVOLVING LOSS OF AIRCRAFT AND HUMAN LIFE, EMPHASIZES THE NEED FOR A RECORDER SYSTEM. WHEN ALL CREW MEMBERS SUFFER FATAL INJURIES, THE ACCIDENT INVESTIGATION BOARD MEMBERS USUALLY HAVE TO SURMISE THEIR FINDINGS. SUCH ACTION OFTEN LEADS TO EXPENSIVE FORCE RETROFITS OR FORCE DOWNTIMES. A RECORDER SYSTEM WILL CUT UNNECESSARY RETROFITS CAUSED BY ACCIDENT INVESTIGATION BOARD DIRECTIVES BASED UPON LIMITED DATA.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS			7	3.2							7	3.2
DATA			7	.3	170	9.0	532	31.0			709	40.3
TRAINER				1.0								1.0
SUPPORT EQUIP.				.4				.1				.5
								1.0				1.0
TOTAL			14	4.9	170	10.1	532	31.0			716	46.0

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: PROPELLER FLIGHT IDLE STOP, MN-10612A

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION: THE FLIGHT IDLE STOP WILL PREVENT THE PROPELLER FROM INADVERTENTLY GOING INTO REVERSE. THIS OCCURS IF A THROTTLE INCREASE CABLE BREAKS ON EITHER AN AIRCRAFT WITH AN UNDAMPED THROTTLE CABLE TENSION REGULATOR OR ONE WITH A SEVERELY WORN REGULATOR DAMPENER. THREE INCIDENTS HAVE OCCURRED AS A RESULT OF BROKEN THROTTLE CABLES. THIS MODIFICATION WILL INSTALL A MECHANICAL STOP ON THE PROPELLER, CONTROL SWITCHES IN THE THROTTLE QUADRANT, AND THE NECESSARY INTERCONNECTING WIRING.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	4	.3	270	3.3	360	5.6	69	1.2			703	10.4
NONRECURRING	2	.1									2	.1
KITS	2	*	270	3.3	360	5.6	69	1.2			701	10.1
DATA		.2										.2
SUPPORT EQUIP.		*										*
TOTAL	4	.3	270	3.3	360	5.6	69	1.2			703	10.4

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 17 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: INSTALL COCKPIT VOICE RECORDER, MN-156C7A

MODELS OF AIRCRAFT AFFECTED: C-130

DESCRIPTION/JUSTIFICATION: FOUR C-130 ACCIDENTS DURING 1978, EACH INVOLVING LOSS OF AIRCRAFT AND LIFE, EMPHASIZE THE NEED FOR A RECORDER SYSTEM. WHEN THERE ARE NO SURVIVORS, ACCIDENT INVESTIGATION BOARDS HAVE TO SURMISE THE CAUSES AND EVENTS LEADING TO THE ACCIDENT. IF THIS INVESTIGATION IS NOT APPROVED, FURTHER C-130 AIRCRAFT ACCIDENT INVESTIGATIONS WILL CONTINUE TO BE BASED ON LIMITED DATA. ONCE IMPLEMENTED, THIS RECORDER SYSTEM WILL REDUCE UNNECESSARY MODIFICATIONS CAUSED BY DIRECTIVES WHICH ARE BASED ON SUCH LIMITED DATA.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	14	1.3			227	2.5	221	2.6	210	2.6	672	9.0
BASIS FOR COST ESTIMATE:												
NONRECURRING	8	.3			227	2.5	221	2.6	210	2.6	8	.3
KITS	6	.1									664	7.8
DATA		.3										.3
TRAINER		.6										.6
SUPPORT EQUIP.		*										*
TOTAL	14	1.3			227	2.5	221	2.6	210	2.6	672	9.0

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/FIELD TEAM/FIELD  
LEAD TIME - 13 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: OUTER WING, MN-196106

MODELS OF AIRCRAFT AFFECTED: C/FC-130B/E/H/P/N

DESCRIPTION/JUSTIFICATION: STRUCTURAL INTEGRITY DATA INDICATES REQUIREMENT FOR OUTER WING MODIFICATION IN THE MID 80'S DUE TO FATIGUE AND CORROSION PROBLEMS AT SEVERAL LOCATIONS ON THE WING. FAILURES HAVE OCCURRED IN THE OUTER WING LOWER FRONT BEAM CAPS, WITH RELATED CRACKS FOUND IN SPAR WEBS AND LOWER FORWARD WING SKIN PANELS AND STRESS CORROSION CRACKING HAS BEEN IDENTIFIED IN THE WING DRY BAYS. INTERIM SOLUTIONS OF REPAIRING OR REPLACING FAILED COMPONENTS HAVE BEEN IMPLEMENTED.

SCOPE OF PROGRAM:

PRIORITY	FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
12	19.8	105	67.5	70	48.0	310	241.1	497	376.4	
10.5										
12	8.8	105	67.5	70	48.0	310	241.1	497	365.4	
.5										
TOTAL	12	19.8	105	67.5	70	48.0	310	241.1	497	376.4

BASIS FOR COST ESTIMATE:

NONRECURRING

KITS

DATA

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/POW  
LEAD TIME - 33 MONTHS





MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: 100KW TRANSMITTER, MN-305C

MODELS OF AIRCRAFT AFFECTED: EC-135 C/H/J/P

DESCRIPTION/JUSTIFICATION: THE 100 KILOWATT TRANSMITTER IS A HIGHER POWER MODIFICATION TO CURRENT AN/ARC-96 WHICH IS A 20 KILOWATT SYSTEM. THE 100KW TRANSMITTER WILL INCREASE RADIATED POWER OF THE VLF/LF TRANSMISSIONS FROM THE EC-135 BY SEVEN DB, PROVIDING A SIGNIFICANT INCREASE IN RANGE OR IMPROVED PERFORMANCE IN HOSTILE CONDITIONS AT ANY GIVEN RANGE.

SCOPE OF PROGRAM:

PRIOR		FY-81		FY-82		FY-83		OUTYFAP		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
4	11.5	13	14.6	2	3.6					19	30.1
4	6.2	13	14.6	2	3.6					19	24.5
	1.0										1.0
	4.6										4.6
4	11.5	13	14.6	2	3.6					19	30.1

BASIS FOR COST ESTIMATE:

KITS  
DATA  
SUPPORT EQUIP.

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 15 MONTHS

1

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: FUEL SAVINGS ADVISORY SYSTEM, MN-104028

MODELS OF AIRCRAFT AFFECTED: C-5

DESCRIPTION/JUSTIFICATION: INSTALLS AN OFF-THE-SHELF FUEL SAVINGS ADVISORY SYSTEM. DECLINING OIL RESERVES AND INCREASING FUEL COSTS DICTATE FUEL CONSERVATION TO THE MAXIMUM EXTENT POSSIBLE.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	12	2.5	28	3.3	37	4.8					77	11.0
NONRECURRING	1	.7									1	.7
KITS	11	1.1	28	3.3	37	4.8					76	9.2
DATA		.7										.7
TRAINER		.4										.4
TOTAL	12	2.5	28	3.3	37	4.8					77	11.0

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: H-WING MODIFICATION, MN-18238B

MODELS OF AIRCRAFT AFFECTED: C-5

DESCRIPTION/JUSTIFICATION: THE CURRENT C-5 WINGS HAVE AN ESTIMATED 7,100 HOUR LIFE. THE FIRST C-5A WILL REACH ITS SERVICE LIFE BY 1982 UNLESS MODIFIED. THIS MODIFICATION WILL INSTALL A NEW CENTER, INNER AND OUTER WING TO EXTEND THE C-5A LIFE BY 30,000 FLYING HOURS OPERATING AT A 200,000 POUND NORMAL PAYLOAD.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	4	87.7	12	166.7	18	192.5	18	190.7	24	243.4	76	881.0
KITS	4	74.6	12	151.8	18	192.5	18	190.7	24	243.4	76	853.0
TOOLING		8.0		11.1								19.1
MOD OF SPARES		5.1		3.8								8.9
TOTAL	4	87.7	12	166.7	18	192.5	18	190.7	24	243.4	76	881.0

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR  
LEAD TIME - 30 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: ALCS PHIII

MODELS OF AIRCRAFT AFFECTED: EC/135 A/C/G

DESCRIPTION/JUSTIFICATION: THE AIRBORNE LAUNCH CONTROL SYSTEM (ALCS) WAS DESIGNED TO PROVIDE AN ALTERNATIVE MEANS OF PROGRAMMING/LAUNCHING MINUTEMEN MISSILES IN THE EVENT THAT GROUND LAUNCH CONTROL CENTERS (LCCS) ARE DESTROYED. THE CURRENT ALCS CAN SELECT PRESTORED TARGETS AND LAUNCH THE MISSILES. HOWEVER, IT CANNOT: (1) DETERMINE MISSILE STATUS (IT MUST "SHOOT IN THE DARK"); OR (2) RETARGET SURVIVING OR WITHHELD MINUTEMEN III MISSILES. PHASE III PROVIDES THESE ADDITIONAL CAPABILITIES.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		CUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST
					3	10.4	6	22.8			9	33.2
NONRECURRING					1	4.5					1	4.5
KITS					2	4.9	6	16.7			8	21.6
DATA						1.0						1.0
TRAINER								5.0				5.0
SUPPORT EQUIP.								1.1				1.1
TOTAL					3	10.4	6	22.8			9	33.2

BASIS FOR COST ESTIMATE:

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 15 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: RE-ENGINE

MODELS OF AIRCRAFT AFFECTED: KC-135

DESCRIPTION/JUSTIFICATION: PROCURES ALL HARDWARE REQUIRED TO RE-ENGINE ONE KC-135 AIRCRAFT WHICH HAS THE OLDER TECHNOLOGY J-57 TURBOJET ENGINES WITH NEW FUEL EFFICIENT, HIGH BY-PASS TURBO FAN ENGINES, INCREASING THE THRUST BETWEEN 40 AND 62 PERCENT DEPENDING ON ENGINE SELECTION. TOTAL DESIGN, DEVELOPMENT AND TESTING EFFORTS RELATING TO THIS PROTOTYPE ARE FUNDED IN THE RDT&E APPROPRIATION AND INSTALLATION LABCR IS PLANNED IN THE OPERATION & MAINTENANCE APPROPRIATION.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		CUTYEAR		TOTAL	
	QTY	CCST	QTY	COST	QTY	CCST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST E		5.0	1	104.5		30.0					1	139.5
NONRECURRING		5.0										
KITS			1	44.5							1	44.5
TOOLING, ADV BUY				60.0		30.0						90.0
TOTAL		5.0	1	104.5		30.0					1	139.5

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR  
LEAD TIME - 30 MONTHS

# MODIFICATION OF AIRCRAFT FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: STANDARD VHF AM/FM RADIO

MODELS OF AIRCRAFT AFFECTED: C-135 (KC/EC/RC)

DESCRIPTION/JUSTIFICATION: IN FEB 1977 THE AIR STAFF VALIDATED A REQUIREMENT TO PROVIDE A 25KHZ VHF AM/FM RADIO CAPABILITY FOR SELECTED AIRCRAFT WHICH WERE AFFECTED BY THE FAA AND THE ICAO IMPLEMENTATION ON 1 JANUARY 1977 OF 25KHZ CHANNEL COMMUNICATION WHERE VHF/AM IS THE PRIMARY FREQUENCY BAND FOR CIVILIAN/MILITARY AIR TRAFFIC CONTROL. THE GOAL OF THE DIRECTED PROGRAM IS TO MEET ALL KNOWN OPERATIONAL REQUIREMENTS, STANDARDIZE THE VHF INVENTORY, IMPROVE RELIABILITY AND MAINTAINABILITY; AND MEET FAA/ICAC REQUIREMENTS.

## SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS	2	.3			168	2.7	168	2.7	337	5.7	2	.3
DATA				.4							673	11.1
TRAINER						.3						.4
SUPPORT EQUIP.						.8						.3
TOTAL	2	.7	168	3.8	168	2.7	168	2.7	337	5.7	675	12.9

METHOD OF IMPLEMENTATION: DFPCI/PDM  
LEAD TIME - 12 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIF FCRCE

MODIFICATION TITLE AND NO: FUEL SAVINGS ADVISORY SYSTEM, MN-104C2B

MODELS OF AIRCRAFT AFFECTED: C-135

DESCRIPTION/JUSTIFICATION: INSTALLS AN OFF-THE-SHELF FUEL SAVINGS ADVISORY SYSTEM. DECLINING OIL RESERVES AND INCREASING FUEL COSTS DICTATE FUEL CONSERVATION TO THE MAXIMUM EXTENT POSSIBLE.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	COST	QTY	COST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:			26	6.1	360	34.9	342	32.0			728	73.0
NONRECURRING			5	2.2							5	2.2
KITS			21	1.7	360	29.9	342	32.0			723	63.6
DATA				2.2								2.2
SUPPORT EQUIP.						5.0						5.0
TOTAL			26	6.1	360	34.9	342	32.0			728	73.0

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/FIELD TEAM  
LEAD TIME - 12 MONTHS



MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: MB-26 SIMULATOR UPGRADE, MN-10508B

MODELS OF AIRCRAFT AFFECTED: C-135

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION WILL REMOVE ALL ANALOG COMM/NAV EQUIPMENT AND REPLACE IT WITH DIGITAL OFF-THE-SHELF, STATE-OF-THE-ART COMPUTATION SYSTEMS AND EQUIPMENT WHICH CAN SIMULATE CURRENT AND PROPOSED AIRCRAFT COMM/NAV SYSTEMS. THIS MODIFICATION IS REQUIRED TO INSURE COCKPIT CONFIGURATION CONCURRENCY AND LOGISTIC SUPPORTABILITY. ALSO REQUIRED TO MAINTAIN TRAINING CAPABILITY UNTIL THE LOW COST TRAINER PROGRAM CAN REPLACE THE MB-26.

SCOPE OF PROGRAM:

PRICE			FY-81			FY-82			FY-83			OUTYEAR			TOTAL		
QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	QTY	CCST	CCST
										9	7.8	9	8.6		18	16.4	
										9	7.8	9	8.6		18	16.4	
										9	7.8	9	8.6		18	16.4	

BASIS FOR COST ESTIMATE:

KITS

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 9 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: LIFE EXTENSION-WING RESKIN, MN-143028

MODELS OF AIRCRAFT AFFECTED: C-135

DESCRIPTION/JUSTIFICATION: SERVICE LIFE OF C-135 AIRCRAFT IS 8,500 TANKER EQUIVALENT FLYING HOURS. REPLACEMENT OF LOWER WING SKIN IS REQUIRED TO ALLOW THE AIRCRAFT TO MEET PROGRAMMED SERVICE LIFE. FLIGHT RESTRICTIONS HAVE BEEN PLACED ON ALL AIRCRAFT EXCEEDING 8,500 FLIGHT HOURS. MODIFICATION INSTALLS 2024-T351 MATERIAL WHICH HAS SUPERIOR CRACK TOLERANCE CHARACTERISTICS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
318	111.7	72	32.0	72	34.4	72	39.0	206	148.1	740	365.2	
BASIS FOR COST ESTIMATE:												
NONRECURRING	4.2											4.2
KITS	318	105.7	72	31.4	72	33.8	72	39.0	206	148.1	740	358.0
DATA		.5										.5
TOOLING		1.3		.6		.6						2.5
TOTAL	318	111.7	72	32.0	72	34.4	72	39.0	206	148.1	740	365.2

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT  
LEAD TIME - 22 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: REFURBISH FLIGHT SIMULATOR, MN-195058

MODELS OF AIRCRAFT AFFECTED: C-135

DESCRIPTION/JUSTIFICATION: REPLACE THE COMPIATION SYSTEM, ASSOCIATED PERIPHERALS, AND SOFTWARE. RELOCATE THE OFFBOARD RADIC AIDS CONSOLE ONBOARD. PRESENT SYSTEM IS INCAPABLE OF ACCEPTING FUTURE MODIFICATIONS, I.E., INS/DCPPLER. THE COMPUTATIONAL SYSTEM IS LOGISTICALLY UNSUPPORTABLE. THE PRESENT CONTROL LOADING DOES NOT RESPOND LIKE THE AIRCRAFT. EXCESSIVE DOWNTIME IS BEING EXPERIENCED DUE TO LACK OF PARTS AND TECHNICAL EXPERTISE.

SCOPE OF PROGRAM:

PRICR	FY-81		FY-82		FY-83		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
			1	4.5			1	4.5
BASIS FOR COST ESTIMATE:								
NONRECURRING			1	2.9			1	2.9
DATA				1.6				1.6
TOTAL			1	4.5			1	4.5

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: ENHANCEMENT (2C/25)

MODELS OF AIRCRAFT AFFECTED: E-3

DESCRIPTION/JUSTIFICATION: ENHANCES E-3A CAPABILITY BY PROVIDING A JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM TERMINAL, ADDITIONAL SITUATION DISPLAY CONSOLES, 5 ADDED UHF RADIOS, A NEW COMMAND CONSOLE FUNCTIONAL GROUP, AND EXPANDED COMPUTER MEMORY.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
BASIS FOR COST ESTIMATE:					1	5.8	13	75.2	19	99.9	33	180.9
KITS												
TRAINER					1	5.8	13	70.2	19	99.9	33	175.9
TOTAL								5.0				5.0
					1	5.8	13	75.2	19	99.9	33	180.9

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR  
LEAD TIME - 25 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: UPDATE

MODELS OF AIRCRAFT AFFECTED: E-3

DESCRIPTION/JUSTIFICATION: AIRCRAFT REQUIRE MODIFICATION TO CORRECT DEFICIENCIES REVEALED DURING DEVELOPMENT AND INITIAL USE. CORRECTIONS ARE INCORPORATED IN PRODUCTION AT THE EARLIEST TIME. UPDATE MODIFICATIONS ARE REQUIRED TO MAINTAIN CONFIGURATION CONTROL OF DELIVERED AIRCRAFT AND THOSE TOO FAR INTO PRODUCTION FOR INCORPORATION. REQUIREMENTS LISTED ARE KNOWN PROBLEM AREAS AND ARE REPRESENTATIVE OF THE TOTAL MODIFICATIONS ANTICIPATED.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:		7.0		10.0		10.0		12.0		36.0		75.0
AIRCRAFT		7.0		10.0		10.0		12.0		36.0		75.0
TOTAL		7.0		10.0		10.0		12.0		36.0		75.0

E-3A REPRESENTATIVE UPDATE MODIFICATIONS

RADOME IMPROVEMENT. REPLACES SURVEILLANCE HALF OF RADOME WITH NEW TAPERED DESIGN TO INCREASE RELIABLE DETECTION AND HEIGHT ACCURACY MEASUREMENT. (OLD RADOME IS RETURNED FOR PRODUCTION INCORPORATION ON IFF SIDE OF NEW AIRCRAFT.)

ALTITUDE AND HEADING REFERENCE SYSTEM (AHRS) REPLACEMENT. REPLACES CURRENT 200-400 HOUR MEANTIME BETWEEN FAILURE (MTBF) AHRS WITH A NEW STATE-OF-THE-ART REPLACEMENT (2000 HOUR MTBF).

FAST/SLOW INDICATOR. RELOCATES THE FLAP POSITION INPUT OF THE SPEED DEVIATION INDICATOR SUB-SYSTEM TO THE OUTBOARD FLAP POSITION TRANSMITTER.

FUME DETECTORS. INSTALLS FUME DETECTORS IN LOWER LOBES TO PROVIDE EARLY FIRE WARNING.

PRESSURE REGULATOR. PROVIDE NEW SF-6 PRESSURE REGULATOR TO PREVENT LOSS DURING ALTITUDE CHANGES.

PADDLE BOARDS. SUPPORT EQUIPMENT INTERFACE PADDLE BOARDS WILL BE RELOCATED TO MINIMIZE DAMAGE DURING HOOK-UP AND DISCONNECT.

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: E-4A TC E-4B RECONFIGURATION, MN-3044

MODELS OF AIRCRAFT AFFECTED: E-4A

DESCRIPTION/JUSTIFICATION: THREE E-4A INTERIM ADVANCED AIRBORNE COMMAND POST (AABNCP) AIRCRAFT ARE SCHEDULED FOR RETROFIT TO THE E-4B CONFIGURATION FOLLOWING DEFENSE SYSTEM ACQUISITION REVIEW COUNCIL (DSARC) III APPROVAL IN EARLY 1980. THE MODIFICATION CONSISTS OF RECONFIGURING THE INTERIM C-135 C3 EQUIPMENT INSTALLED ON THE E-4A, AND INTEGRATING IT WITH THE NEWLY DEVELOPED E-4B C3 EQUIPMENT. THE E-4B CONFIGURATION GREATLY INCREASES FORCE CONNECTIVITY, IMPROVES RELIABILITY AND PROVIDES NUCLEAR HARDENING.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
	1	124.3	1	135.3	1	111.6					3	371.2
BASIS FOR COST ESTIMATE:												
DATA		6.6		4.2		3.2						14.0
C3 EQ		87.0		97.6		76.4						261.0
AIRCRAFT	1	20.7	1	33.5	1	32.0					3	86.2
ADV. PROC		10.0										10.0
TOTAL	1	124.3	1	135.3	1	111.6					3	371.2

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR  
LEAD TIME - 18 MONTHS

# MODIFICATION OF AIRCRAFT FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: AUTOMATIC DATA PROCESSING (ADP)

MODELS OF AIRCRAFT AFFECTED: F-4E

DESCRIPTION/JUSTIFICATION: TO IMPROVE THE F-4 BATTLE STAFF MANAGEMENT CAPABILITY; PROVIDE CRITICAL AND TIME SENSITIVE INFORMATION TO THE NATIONAL COMMAND AUTHORITY; AND PROVIDE A CREDIBLE MEANS OF PROSECUTING THE STR. ADP WILL ACCOMPLISH THIS BY REDUCING THE MANUAL MANIPULATION OF STR DATA. THE ADP SYSTEM WILL CONSIST OF MINI-COMPUTER, MASS STORAGE, DISPLAY DEVICES, PRINTERS AND INTERFACES TO ON-GOING COMMUNICATIONS EQUIPMENT. FOUR F-4E AIRCRAFT WILL BE MODIFIED. ADP FOR AIRCRAFT 5856 WILL BE INCLUDED IN BASELINE PRODUCTION.

## SCOPE OF PROGRAM:

	FY-81		FY-82		FY-83		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST
NONRECURRING								
KITS	1	1.0			1	1.0	1	1.0
DATA		1.4		4.0		4.0	3	6.4
SUPPORT EQUIP.		1.3					1	1.3
MOD OF SPARES		1.4				1.0	1	1.4
TOTAL	1	3.0	2	4.0	1	6.0	4	14.1



# MODIFICATION OF AIRCRAFT FY-82 PRE-82

FY-82 APPROPRIATION: AIRCRAFT MODIFICATION, AIR FORCE

MODIFICATION TITLE AND NH: SINGLE CHANNEL TRANSDUCER

MODELS OF AIRCRAFT AFFECTED: E-4

DESCRIPTION/JUSTIFICATION: THE SINGLE CHANNEL TRANSDUCER (SCT) PROVIDES AN ADDITIONAL EMERGENCY ACTION MESSAGE DISSEMINATION CAPABILITY AND WILL BE DEPLOYED ON HOST SATELLITES SUCH AS ASCS III SATELLITES. THE SCT WILL BE CAPABLE OF JHE/SHE UPLINK TO THE SATELLITE AND NEAR-TERM UHF DOWNLINK WITH FAR-TERM SAE DOWNLINK. THE SCT IS AN ALTERNATE MEANS OF FAN DISSEMINATION WITH A HIGH DEGREE OF SURVIVABILITY. THE E-4B, THE MOST SURVIVABLE ARNCP, MUST HAVE THE CAPABILITY TO INJECT FANS INTO THE SCT USING EITHER A UHF UPLINK OR AN SHE UPLINK. THE TASK INVOLVES DEVELOPMENT OF A COMMAND-POST MEDIUM PROCESSOR FOR THE EXISTING AFSATCOM TERMINAL, THE INTERFACING OF THE AFSATCOM TERMINAL TO THE EXISTING E-4B SHE TERMINAL AND INTEGRATION INTO THE E-4B.

SCOPE OF PROGRAM:

P&ID	FY-81		FY-82		FY-83		FY-84		FY-85		FY-86		FY-87		FY-88		FY-89		FY-90		FY-91		FY-92		FY-93		FY-94		FY-95		FY-96		FY-97		FY-98		FY-99		FY-00		FY-01		FY-02		FY-03		FY-04		FY-05		FY-06		FY-07		FY-08		FY-09		FY-10		FY-11		FY-12		FY-13		FY-14		FY-15		FY-16		FY-17		FY-18		FY-19		FY-20		FY-21		FY-22		FY-23		FY-24		FY-25		FY-26		FY-27		FY-28		FY-29		FY-30		FY-31		FY-32		FY-33		FY-34		FY-35		FY-36		FY-37		FY-38		FY-39		FY-40		FY-41		FY-42		FY-43		FY-44		FY-45		FY-46		FY-47		FY-48		FY-49		FY-50		FY-51		FY-52		FY-53		FY-54		FY-55		FY-56		FY-57		FY-58		FY-59		FY-60		FY-61		FY-62		FY-63		FY-64		FY-65		FY-66		FY-67		FY-68		FY-69		FY-70		FY-71		FY-72		FY-73		FY-74		FY-75		FY-76		FY-77		FY-78		FY-79		FY-80		FY-81		FY-82		FY-83		FY-84		FY-85		FY-86		FY-87		FY-88		FY-89		FY-90		FY-91		FY-92		FY-93		FY-94		FY-95		FY-96		FY-97		FY-98		FY-99		FY-00		FY-01		FY-02		FY-03		FY-04		FY-05		FY-06		FY-07		FY-08		FY-09		FY-10		FY-11		FY-12		FY-13		FY-14		FY-15		FY-16		FY-17		FY-18		FY-19		FY-20		FY-21		FY-22		FY-23		FY-24		FY-25		FY-26		FY-27		FY-28		FY-29		FY-30		FY-31		FY-32		FY-33		FY-34		FY-35		FY-36		FY-37		FY-38		FY-39		FY-40		FY-41		FY-42		FY-43		FY-44		FY-45		FY-46		FY-47		FY-48		FY-49		FY-50		FY-51		FY-52		FY-53		FY-54		FY-55		FY-56		FY-57		FY-58		FY-59		FY-60		FY-61		FY-62		FY-63		FY-64		FY-65		FY-66		FY-67		FY-68		FY-69		FY-70		FY-71		FY-72		FY-73		FY-74		FY-75		FY-76		FY-77		FY-78		FY-79		FY-80		FY-81		FY-82		FY-83		FY-84		FY-85		FY-86		FY-87		FY-88		FY-89		FY-90		FY-91		FY-92		FY-93		FY-94		FY-95		FY-96		FY-97		FY-98		FY-99		FY-00		FY-01		FY-02		FY-03		FY-04		FY-05		FY-06		FY-07		FY-08		FY-09		FY-10		FY-11		FY-12		FY-13		FY-14		FY-15		FY-16		FY-17		FY-18		FY-19		FY-20		FY-21		FY-22		FY-23		FY-24		FY-25		FY-26		FY-27		FY-28		FY-29		FY-30		FY-31		FY-32		FY-33		FY-34		FY-35		FY-36		FY-37		FY-38		FY-39		FY-40		FY-41		FY-42		FY-43		FY-44		FY-45		FY-46		FY-47		FY-48		FY-49		FY-50		FY-51		FY-52		FY-53		FY-54		FY-55		FY-56		FY-57		FY-58		FY-59		FY-60		FY-61		FY-62		FY-63		FY-64		FY-65		FY-66		FY-67		FY-68		FY-69		FY-70		FY-71		FY-72		FY-73		FY-74		FY-75		FY-76		FY-77		FY-78		FY-79		FY-80		FY-81		FY-82		FY-83		FY-84		FY-85		FY-86		FY-87		FY-88		FY-89		FY-90		FY-91		FY-92		FY-93		FY-94		FY-95		FY-96		FY-97		FY-98		FY-99		FY-00		FY-01		FY-02		FY-03		FY-04		FY-05		FY-06		FY-07		FY-08		FY-09		FY-10		FY-11		FY-12		FY-13		FY-14		FY-15		FY-16		FY-17		FY-18		FY-19		FY-20		FY-21		FY-22		FY-23		FY-24		FY-25		FY-26		FY-27		FY-28		FY-29		FY-30		FY-31		FY-32		FY-33		FY-34		FY-35		FY-36		FY-37		FY-38		FY-39		FY-40		FY-41		FY-42		FY-43		FY-44		FY-45		FY-46		FY-47		FY-48		FY-49		FY-50		FY-51		FY-52		FY-53		FY-54		FY-55		FY-56		FY-57		FY-58		FY-59		FY-60		FY-61		FY-62		FY-63		FY-64		FY-65		FY-66		FY-67		FY-68		FY-69		FY-70		FY-71		FY-72		FY-73		FY-74		FY-75		FY-76		FY-77		FY-78		FY-79		FY-80		FY-81		FY-82		FY-83		FY-84		FY-85		FY-86		FY-87		FY-88		FY-89		FY-90		FY-91		FY-92		FY-93		FY-94		FY-95		FY-96		FY-97		FY-98		FY-99		FY-00		FY-01		FY-02		FY-03		FY-04		FY-05		FY-06		FY-07		FY-08		FY-09		FY-10		FY-11		FY-12		FY-13		FY-14		FY-15		FY-16		FY-17		FY-18		FY-19		FY-20		FY-21		FY-22		FY-23		FY-24		FY-25		FY-26		FY-27		FY-28		FY-29		FY-30		FY-31		FY-32		FY-33		FY-34		FY-35		FY-36		FY-37		FY-38		FY-39		FY-40		FY-41		FY-42		FY-43		FY-44		FY-45		FY-46		FY-47		FY-48		FY-49		FY-50		FY-51		FY-52		FY-53		FY-54		FY-55		FY-56		FY-57		FY-58		FY-59		FY-60		FY-61		FY-62		FY-63		FY-64		FY-65		FY-66		FY-67		FY-68		FY-69		FY-70		FY-71		FY-72		FY-73		FY-74		FY-75		FY-76		FY-77		FY-78		FY-79		FY-80		FY-81		FY-82		FY-83		FY-84		FY-85		FY-86		FY-87		FY-88		FY-89		FY-90		FY-91		FY-92		FY-93		FY-94		FY-95		FY-96		FY-97		FY-98		FY-99		FY-00		FY-01		FY-02		FY-03		FY-04		FY-05		FY-06		FY-07		FY-08		FY-09		FY-10		FY-11		FY-12		FY-13		FY-14		FY-15		FY-16		FY-17		FY-18		FY-19		FY-20		FY-21		FY-22		FY-23		FY-24		FY-25		FY-26		FY-27		FY-28		FY-29		FY-30		FY-31		FY-32		FY-33		FY-34		FY-35		FY-36		FY-37		FY-38		FY-39		FY-40		FY-41		FY-42		FY-43		FY-44		FY-45		FY-46		FY-47		FY-48		FY-49		FY-50		FY-51		FY-52		FY-53		FY-54		FY-55		FY-56		FY-57		FY-58		FY-59		FY-60		FY-61		FY-62		FY-63		FY-64		FY-65		FY-66		FY-67		FY-68		FY-69		FY-70		FY-71		FY-72		FY-73		FY-74		FY-75		FY-76		FY-77		FY-78		FY-79		FY-80		FY-81		FY-82		FY-83		FY-84		FY-85		FY-86		FY-87		FY-88		FY-89		FY-90		FY-91		FY-92		FY-93		FY-94		FY-95		FY-96		FY-97		FY-98		FY-99		FY-00		FY-01		FY-02		FY-03		FY-04		FY-05		FY-06		FY-07		FY-08		FY-09		FY-10		FY-11		FY-12		FY-13		FY-14		FY-15		FY-16		FY-17		FY-18		FY-19		FY-20		FY-21		FY-22		FY-23		FY-24		FY-25		FY-26		FY-27		FY-28		FY-29		FY-30		FY-31		FY-32		FY-33		FY-34		FY-35		FY-36		FY-37		FY-38		FY-39		FY-40		FY-41		FY-42		FY-43		FY-44		FY-45		FY-46		FY-47		FY-48		FY-49		FY-50		FY-51		FY-52		FY-53		FY-54		FY-55		FY-56		FY-57		FY-58		FY-59		FY-60		FY-61		FY-62		FY-63		FY-64		FY-65		FY-66		FY-67		FY-68		FY-69		FY-70		FY-71		FY-72		FY-73		FY-74		FY-75		FY-76		FY-77		FY-78		FY-79		FY-80		FY-81		FY-82		FY-83		FY-84		FY-85		FY-86		FY-87		FY-88		FY-89		FY-90		FY-91		FY-92		FY-93		FY-9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MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: CRASHWORTHY FUEL SYSTEM (INTERNAL), MN-65036A

MODELS OF AIRCRAFT AFFECTED: CH-3E/HH-3E

DESCRIPTION/JUSTIFICATION: REQUIRED TO PREVENT POSTCRASH FIRE IN SURVIVABLE ACCIDENTS AND THE RESULTANT LOSS OF LIFE AND EQUIPMENT. PRESENT TECHNOLOGY CAN PROVIDE FUEL SYSTEMS THAT ARE CAPABLE OF CONTAINING THE FUEL DURING SURVIVABLE MISFAPS. MOD WILL REPLACE THE PRESENT INTERNAL FUEL SYSTEM, AND WILL CONSIST OF FLEXIBLE FUEL LINES, SELF SEALING BREAKAWAY VALVES AND FITTINGS, CRASH RESISTANT FUEL CELLS AND FRANGIBLE MOUNTING HARDWARE, PERMITTING THE INTERNAL FUEL SYSTEM COMPONENTS TO SHIFT WITHOUT RUPTURING.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	1	.6					46	6.9	37	5.6	84	13.1
NONRECURRING	1	.6					46	6.3	37	5.6	1	.6
KITS								.4			83	11.9
DATA								.2				.4
SUPPORT EQUIP.												.2
TOTAL	1	.6					46	6.9	37	5.6	84	13.1

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/FIELD TEAM/FIELD  
LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: CRASHWORTHY FUEL SYSTEMS, MN-69037A

MODELS OF AIRCRAFT AFFECTED: H4/C4-538/C/F

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION WILL INCLUDE BREAK-AWAY FUEL LINES/FITTINGS, IMPACT/RUPTURE RESISTANT FUEL CELLS AND WIRING TO PREVENT IGNITION OF FUEL SPILLS. THIS WAS A RECOMMENDATION OF THE ACCIDENT BOARD THAT INVESTIGATED 68-10927.

SCOPE OF PROGRAM:

PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
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	.7			1	4.0	32	27.7	15	13.5	48	45.9

BASIS FOR COST ESTIMATE:

NONRECURRING											
KITS				1	3.5	32	26.9	15	13.5	48	43.9
DATA					.5						.5
TRAINER							.8				.8
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TOTAL				1	4.0	32	27.7	15	13.5	48	45.9

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 15 MONTHS

DESCRIPTION/JUSTIFICATION:

SCOPE OF PROGRAM:											
PRIOR		FY-61		FY-62		FY-63		OUTYEAR		TOTAL	
QTY	CJST	QTY	CJST	QTY	CJST	QTY	CJST	QTY	CJST	QTY	CJST
BASIS FOR COST ESTIMATE:											
NONRECURRING											
KITS						1.5				1.5	
DATA								7.7		7.7	
TRAINER							.3			.3	
SUPPORT EQUIP.							1.2	1.2		1.2	
							.5			1.7	
TOTAL							3.5		8.9		12.4

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 12 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NT: VINSON TAG SECURE VOICE, MN- 3040

MODELS OF AIRCRAFT AFFECTED: MULTI AN/ARC-164

DESCRIPTION/JUSTIFICATION: VINSON SECURE VOICE PROVIDES ON-LINE ENCRYPTION/DECRYPTION OF VHF/UHF AM/FM HALF-DOUPLEX RADIO FOR ALL CLASSIFICATION OF TRAFFIC. THE TSEC/KY-58 IS DESIGNED FOR OPERATION IN AIRCRAFT INSTRUMENT PANELS OR RADIO-CONSOLE CONTROL PANELS, OR IT MAY BE LOCATED IN EQUIPMENT BAYS AND OPERATED BY A REMOTE CONTROL UNIT (RCU). THIS MODIFICATION ENABLES THE AN/ARC-164 TO OPERATE IN THE 25 KHZ BASEBAND MODE WITH THE VINSON EQUIPMENT.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
3025	4.1	4238	4.0				8687	9.4	4000	5.0	20000	22.5
BASIS FOR COST ESTIMATE:												
NONRECURRING		.4										.4
KITS	3025	3.2	4238	4.0			8687	9.4	4000	5.0	20000	21.6
DATA		.5										.5
TOTAL	3025	4.1	4238	4.0			8687	9.4	4000	5.0	20000	22.5

METHOD OF IMPLEMENTATION: INSTALLATION - FIELD  
LEAD TIME - 6 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: STANDARD COMBINED ALTITUDE RADAR ALTIMETER (CARA), MN-10611C

MODELS OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION: REPLACE EXISTING RADAR ALTIMETER AN/APN-22, 42A,-133, -150(V),-155,-159, -167,-171(V),-194(V),-203(V), SRC-718, AMLS & CSA LARA) WITH A NEW SOLID STATE ALTIMETER. NEW ALTIMETER SYSTEM WILL MEET REQUIREMENTS OF ARINC SPECIFICATION 791RCR-CARA-523 WITH A RELIABILITY GOAL GREATER THAN 2000 HOURS. FURTHER WITH THE EXCEPTION OF C-130 SERIES AIRCRAFT, IT WILL BE A DIRECT REPLACEMENT WITH NO CHANGE TO AIRCRAFT WIRING (ONE NEW SYSTEM WILL REPLACE TWO EXISTING SYSTEMS ON C-130 AIRCRAFT, NECESSITATING WIRING CHANGES AND COSTS AS SHOWN, DURING PDM). EXISTING SYSTEMS HAVE A LOW RELIABILITY AND HAVE HIGH LOGISTIC SUPPORT COSTS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS					2.1		296	4.9	3512	53.7	3808	58.6
DATA					.5			.2		.8		1.9
TRAINER										8.1		8.1
SUPPORT EQUIP.								.3		5.6		5.9
TOTAL					3.0		296	5.4	3512	68.2	3808	76.6

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 4C MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: UPDATE RWR SIGNAL PROCESSOR, MN-10613B

MODELS OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION: MODIFICATION WILL REPLACE EXISTING PROGRAMMABLE READ ONLY MEMORY (PROM) DEVICES WITH REUSABLE ELECTRICALLY ERASABLE READ ONLY MEMORY (EEROM) DEVICES WHICH WILL IMPROVE RELIABILITY, INCREASE THE PROCESSOR SPEED AND PROVIDE THE CAPABILITY TO PROGRAM THE SIGNAL PROCESSOR WHILE INSTALLED ON THE AIRCRAFT. REQUIRED FOR FIRST LINE AIRCRAFT TO HAVE THE CAPABILITY TO IDENTIFY AND LOCATE THE LATEST KNOWN ENEMY THREATS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		DUTY YEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	770		770	7.7	1583	12.9	2118	17.4	498	6.9	4969	44.9
BASIS FOR COST ESTIMATE:												
NONRECURRING	15	1.8		.3				.1		.2	15	2.4
KITS	755	5.1	1583	12.3	2118	17.0	498	6.4			4954	40.8
DATA		.6										.6
SUPPORT EQUIP.		.2		.2		.3		.3				1.1
TOTAL	770	7.7	1583	12.9	2118	17.4	498	6.9			4969	44.9

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 27 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: HF SINGLE SIDE BAND RADIC, MN-1662CC

MODELS OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION: CURRENT RADICS DO NOT MEET THE 1980 REQUIREMENTS FOR CHANNEL SPACING, FREQUENCY ACCURACY AND STABILITY AND PARKHILL COMPATIBILITY. THE ARC-123 AND AT-440 HAVE HIGH LOGISTICS SUPPORT COSTS (OLD UNRELIABLE TUBE TYPE EQUIPMENTS), LOW MEAN TIME BETWEEN DEMAND AND OBSOLETE DESIGN ON MANY SUB-ASSEMBLIES. THIS IS THE SECOND STEP IN THE HF MODERNIZATION PROGRAM. STANDARDIZATION OF HF RADICS WILL PROVIDE SUBSTANTIAL LOGISTICS COST REDUCTIONS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	5	.8	257	10.3	578	12.8	505	13.9	2962	62.9	4307	100.7
NONRECURRING	5	.8	257	8.2	578	11.0	505	12.3	2962	50.6	4302	82.1
KITS				.7		.6		.6		1.6		3.5
DATA				.3		.4		.3		5.4		6.4
TRAINER				.4		.5		.4		2.8		4.1
SUPPORT EQUIP.												
TOTAL	5	.8	257	10.3	578	12.8	505	13.9	2962	62.9	4307	100.7

METHOD OF IMPLEMENTATION: INSTALLATION - ORG/FIELD  
LEAD TIME - 12 MONTHS



FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE  
MODIFICATION TITLE AND NO: MOD OF EJECTION SEATS, MA-28270A  
MODELS OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION: THE EJECTION SEATS CN 10 TYPES OF AIRCRAFT WILL BE MODIFIED TO ACCEPT AN IMPROVED RESTRAINT SYSTEM THAT WILL BE SIMPLE IN DESIGN, CAPABLE OF BEING DISASSEMBLED AND REWORKED AT FIELD LEVEL, HAVE A MEANS OF POSITIVELY DISENGAGING ITSELF DURING BALLISTIC FIRING, BE EASILY CLOSED AND MANUALLY OPENED, BE INCAPABLE OF BEING LOCKED UNLESS THE PARACHUTE ARMING LANYARD KEY IS CONNECTED AND BE CAPABLE OF RETAINING AND RELEASING SHOULDER HARNESS LOOPS.

[illegible]

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 6 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: REPLACE PERISCOPIC SEXTANT MECHANICAL AVERAGER, MN-40650B

MODELS OF AIRCRAFT AFFECTED: MULTI

DESCRIPTION/JUSTIFICATION: THE MECHANICAL AVERAGER IS RESPONSIBLE FOR 60% OF ALL PERISCOPIC SEXTANT FAILURES AND HAS MANY PARTS REQUIRING HAND FITTING AND ADJUSTMENT DURING OVERHAUL. REPLACEMENT PARTS FOR THE AVERAGER ARE DIFFICULT TO OBTAIN. THIS MODIFICATION WILL REPLACE THE MECHANICAL AVERAGER WITH AN ELECTRONIC AVERAGER, WHICH WILL DOUBLE THE MEAN TIME BETWEEN DEMAND (MTBD) FOR THE AVERAGER FROM 500 TO 1000 HOURS, AND VIRTUALLY ELIMINATE DEPOT REPAIR. THIS MOD WILL ELIMINATE 1229 SPARE AVERAGERS AND 3002 SPARE SEXTANTS FROM THE AIR FORCE INVENTORY AND ANNUAL MAINTENANCE COSTS FOR THE SEXTANT WILL BE REDUCED FROM \$3,208,799 TO \$1,425,501.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS												
DATA												
TOTAL												

METHOD OF IMPLEMENTATION: INSTALLATION - CRG/INTERMEDIATE  
LEAD TIME - 18 MONTHS

\* LESS THAN \$ 50,000

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: UNFOLSEEN SAFETY MODIFICATIONS, MN-9999A

MODELS OF AIRCRAFT AFFECTED: MULTI-AIRCRAFT

DESCRIPTION/JUSTIFICATION: THERE ARE SAFETY MOD REQUIREMENTS THAT DEVELOP AFTER THE BUDGET IS PREPARED EACH YEAR FOR WHICH THERE IS NO PROGRAM AND, THEREFORE, NO CAPABILITY TO INITIATE WITHOUT REPROGRAMMING. THE FOLLOW-ON CCST OF A SPECIFIC MCC APPLICABLE TO A SUBSEQUENT FISCAL YEAR WOULD BE IDENTIFIED TO THE APPLICABLE WEAPON SYSTEM LINE AND GIVEN A TIMELY REVIEW.

SCOPE OF PROGRAM:

PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
---	---	---	---	---	---	---	---	---	---	---	---
				1.9			1.9		5.7		9.5
BASIS FOR COST ESTIMATE:											
AIRCRAFT											
				1.9			1.9		5.7		9.5
TOTAL											
				1.9			1.9		5.7		9.5

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: CLASSIFIED PROJECTS

MODELS OF AIRCRAFT AFFECTED: MULTI-AIRCRAFT

DESCRIPTION/JUSTIFICATION: THESE FUNDS ARE REQUIRED TO PROVIDE FOR THE MODIFICATION OF VARIOUS AIRCRAFT AND AIRBORNE SYSTEMS USED IN CLASSIFIED MISSIONS, WHICH BECAUSE OF THEIR SENSITIVE NATURE, REQUIRE THE APPLICATION OF SPECIAL MANAGEMENT AND SECURITY SAFEGUARDS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
BASIS FOR COST ESTIMATE:	92.6		100.6	51.0		72.8		232.4				549.4
CLASSIFIED	92.6		100.6	51.0		72.8		232.4				549.4
TOTAL	92.6		100.6	51.0		72.8		232.4				549.4

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: CIVIL RESERVE AIR FLEET (CRAF)

MODELS OF AIRCRAFT AFFECTED: WIDE BODIED CIVIL A/C (B-747/DC-10/L-1011)

DESCRIPTION/JUSTIFICATION: EXISTING MILITARY STRATEGIC CARGO AIRLIFT CAPABILITY, AUGMENTED BY CURRENTLY AVAILABLE CRAF STAGE III CARGO CAPABILITY, IS DEFICIENT IN SATISFYING THE TIME-PHASED DEPLOYMENT REQUIREMENTS OF A MAJOR CONTINGENCY. ADDITIONALLY, MANY OF THE CURRENT CRAF CARGO AIRCRAFT ARE 20 YEARS OLD, OR OLDER, AND ARE BEING PHASED OUT OF THE COMMERCIAL FLEET. TO IMPROVE OUR STRATEGIC AIRLIFT CAPABILITY, THE AIR FORCE DEVELOPED A PROGRAM FOR THE ADDITION OF MILITARY CARGO CONVERTIBILITY FEATURES DURING INITIAL FABRICATION OF CIVIL PASSENGER AIRCRAFT. THE MODIFICATIONS INCLUDE ADDITION OF A NOSE VISOR OR SIDE-LOADING CARGO ACCESS DOOR AND A STRENGTHENED FLOOR, REMOVABLE CARGO HANDLING KITS, ROLLERS AND RAILS ARE REQUIRED FOR EACH AIRCRAFT TO INSURE COMPATIBILITY WITH THE MILITARY 463L CARGO HANDLING SYSTEM. THE PROGRAM ALSO INCLUDES COMPENSATION (BASED ON A 16-YEAR SERVICE LIFE) FOR THE INCREASED OPERATING COSTS RESULTING FROM INCREASED NET OPERATING WEIGHT.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	CCST	QTY	COST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	3	53.6	3	39.8	6	87.8	7	108.9	21	345.8	40	635.9
B-747					2	41.0	2	45.0	4	102.7	8	188.7
DC-10	3	53.6	3	39.8	3	37.5	4	54.4	10	160.7	23	346.0
L-1011					1	9.3	1	9.5	7	82.4	9	101.2
TOTAL	3	53.6	3	39.8	6	87.8	7	108.9	21	345.8	40	635.9

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR  
LEAD TIME - 18 MONTHS

MODIFICATION OF AIRCRAFT  
FY-82 PROGRAM

FY-82 APPROPRIATION: AIRCRAFT PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: TR-1

MODELS OF AIRCRAFT AFFECTED: TR-1

DESCRIPTION/JUSTIFICATION: PROVIDES

AIRCRAFT WEIGHT REDUCTION PROGRAM, AVIONICS UPDATE, COCKPIT INSTRUMENTS UPGRADE, AND IMPLEMENTS

SCOPE OF PROGRAM:

PRIOR		FY-81		FY-82		FY-82		OUTYEAR		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
---	---	---	---	---	---	---	---	---	---	---	---
				9	7.3	37	26.0			46	33.3

BASIS FOR COST ESTIMATE:

KITS

TOTAL

		9	7.3	37	26.0			46	33.3
---	---	---	---	---	---	---	---	---	---
		9	7.3	37	26.0			46	33.3

MISSILE PROCUREMENT, AIR FORCE

For construction, procurement, and modification of missiles, rockets, spacecraft and related equipment, including spare parts and accessories therefore, ground handling equipment, and training devices; expansion of public and private plants, government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land without regard to Section 9774 of Title 10, United States Code, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to the approval of title as required by Section 355, Revised Statutes, as amended; reserve plant and government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things; S4, 274,600 to remain available for obligation until September 30, 1984 (5 U.S.C. 3109; 10 U.S.C. 2271-79, 2353, 2386, 2663, 2672, 2672a, 8012, 9501-02, 9595, 9531-32, 9741-42; 31 U.S.C. 649c, 718; 50 U.S.C. 451, 453, 455; Department of Defense Appropriation Act, 1981 additional legislation to be proposed.

AF

## Missile Procurement, Air Force

15 JAN 81

## Program and Financing (in thousands of dollars)

Identification code	57-3020-0-1-051	Budget plan (amounts for procurement actions programmed)				Obligations				
		1980 actual		1981 est.		1982 est.		1980 actual	1981 est.	1982 est.
		1980 actual	1981 est.	1982 est.	1980 actual	1981 est.	1982 est.			
Program by activities										
Direct										
1	Ballistic missiles	108,500	141,990	106,600	176,280	90,729	131,434			
2	Other missiles	607,090	916,900	1,431,800	531,652	679,612	1,128,321			
3	Modification of in-service missiles	52,200	104,552	96,800	53,738	76,239	90,706			
4	Spares and repair parts	95,600	146,091	200,100	86,524	119,559	171,708			
5	Other support	1,295,841	1,331,384	2,439,300	1,134,774	1,569,012	2,211,917			
Total direct		2,159,231	3,140,917	4,274,600	1,882,968	2,535,151	3,734,086			
Reimbursable program (total)		91,274	94,481	92,000	79,632	71,849	61,634			
Total		2,250,505	3,235,398	4,366,600	2,062,600	2,607,000	3,795,720			
Financing										
Offsetting collections from:										
11 00	Federal funds	-61,762	-56,500	-56,500	-46,910	-56,500	-56,500			
13 00	Trust funds	-29,494	-37,481	-35,000	-39,618	-37,481	-35,000			
14 00	Non-federal sources	-18	-500	-500	-23	-500	-500			
17 00	Recovery of prior year obligations, obl plan				-11,173					
21 40	Unobligated balance available, start of year									
21 40	For completion of prior year budget plans									
23 40	Reprogramming from or to prior year budget plan	-88,324			-588,951	-694,982	-1,323,380			
23 40	Unobligated balance transferred to other accounts									
24 40	Unobligated balance available, end of year	27,400			27,400					
25 00	Unobligated balance lapsing	45,224			694,982	1,323,380	1,894,260			
39 00	Budget authority	2,143,531	3,140,917	4,274,600	2,143,531	3,140,917	4,274,600			
Budget authority										
40 00	Appropriation	2,160,385	3,140,917	4,274,600	2,160,385	3,140,917	4,274,600			
41 00	Appropriation rescinded	-15,700			-15,700					
42 00	Transferred to other accounts	-40,754			-40,754					
42 00	Transferred from other accounts	8,200			8,200					
43 00	Appropriation (adjusted)									
50 00	Reappropriation	2,112,131	3,140,917	4,274,600	2,112,131	3,140,917	4,274,600			
Total		3,140,917	3,140,917	4,274,600	3,140,917	3,140,917	4,274,600			
Relation of obligations to outlays										
71 00	Obligations incurred, net				1,976,048	2,512,519	3,703,720			
72 40	Obligated balance, start of year				1,639,046	1,809,031	2,247,550			
74 40	Obligated balance, end of year				-1,809,031	-2,247,550	-3,146,270			
77 00	Adjustments in expired accounts				15,345					
78 00	Adjustments in unexpired accounts				-11,173					
90 00	Outlays				1,810,237	2,074,000	2,805,000			



AF

Missile Procurement, Air Force

15 JAN 81

Object Classification (in thousands of dollars)

Identification code 57-3020-0-1-051		1980 actual		1981 est.		1982 est.	
Direct obligations:							
31.0	Equipment	1,982,968		2,535,151		3,734,086	
99.0	Total direct obligations	1,982,968		2,535,151		3,734,086	
Reimbursable obligations:							
31.0	Equipment	79,632		71,649		61,634	
99.9	Total obligations	2,062,600		2,607,000		3,795,720	

AF

## Missile Procurement, Air Force

15 JAN 61

Program and Financing (in thousands of dollars)		1978 Fiscal year program	
Identification code	57-3020-0-1-051	Obligations	
		Budget plan (amounts for procurement actions programmed)	
		1980 actual	1981 est. 1982 est.
Program by activities:			
Direct			
10 00	Total	202,167	1982 est.
Financing:			
Offsetting collections from:			
11 00	Adjustment to pay federal fund orders	-719	
13 00	Adjustment to pay trust fund orders	1,494	
17 00	Recovery of prior year obligations, obl plan	-2,988	
21 40	Unobligated balance available, start of year:		
21 40	For completion of prior year budget plans	-272,468	
23 40	Reprogramming from or to prior year budget plan		
23 40	Unobligated balance transferred to other accounts		
25 00	Unobligated balance lapsing	11,600	
40 00	Budget authority (appropriation)	45,224	
		-15,700	

AF

## Missile Procurement, Air Force

15 JAN 81

Program and Financing (in thousands of dollars)		1979 Fiscal Year program			
		Budget plan (amounts for procurement actions programmed)		Obligations	
Identification code 57-3020-0-1-051		1980 actual	1981 est.	1980 actual	1981 est. 1982 est.
Program by activities:					
Direct:					
1. Ballistic missiles				5,727	1,926
2. Other missiles				96,265	43,324
3. Modification of inservice missiles				7,550	3,786
4. Spares and repair parts				15,626	7,156
5. Other support				76,444	36,498
Total direct				201,612	92,690
Reimbursable program (total)				9,827	791
Total				211,439	93,481
Financing:					
Offsetting collections from:					
11.00 Adjustment to by federal fund orders				15,571	
13.00 Adjustment to by trust fund orders				-11,618	
14.00 Adjustment to non-federal sources				-5	
17.00 Recovery of prior year obligations, obi plan				-8,185	
Unobligated balance available, start of year:					
21.40 For completion of prior year budget plans				-316,483	-93,481
21.40 Reprogramming from or to prior year budget plan					
23.40 Unobligated balance transferred to other accounts					
24.40 Unobligated balance available, end of year				15,800	
40.00 Budget authority (appropriation)				93,481	

Missile Procurement, Air Force

Program and Financing (in thousands of dollars)

1980 Fiscal Year program

Obligations

Identification code 57-3020-0-1-051

Budget plan (amounts for procurement actions programmed)

1980 actual 1981 est 1982 est 1980 actual 1981 est 1982 est

Program by activities:					
Direct:					
10.00	Total	2,250,505		434,982	166,519
	Reimbursable program (total)	2,159,231		421,566	158,466
	Total direct	91,274		13,416	8,053
	Total	2,250,505		434,982	166,519

Financing:					
Offsetting collections from:					
11.00	Federal funds	-61,762		-61,762	
13.00	Trust funds	-29,494		-29,494	
14.00	Non-federal sources	-18		-18	
21.40	Unobligated balance available, start of year				-166,519
24.40	Unobligated balance available, end of year			601,501	166,519
39.00	Budget authority	2,159,231		2,159,231	

Budget authority:					
40.00	Appropriation	2,160,385		2,160,385	
41.00	Transferred to other accounts	-40,754		-40,754	
42.00	Transferred from other accounts	8,200		8,200	
43.00	Appropriation (adjusted)	2,127,831		2,127,831	
50.00	Reappropriation	31,400		31,400	



15 JAN 81

## Missile Procurement, Air Force

AF	Identification code	57-3020-0-1-05	Program and Financing (in thousands of dollars)		1982 Fiscal year program	
			Budget plan (amounts for procurement actions programmed)		Obligations	
			1980 actual	1981 est.	1980 actual	1981 est.
<b>Program by activities:</b>						
	Direct:					
	1. Ballistic missiles			106,600		85,908
	2. Other missiles			1,431,800		788,280
	3. Modification of inservice missiles			96,800		54,141
	4. Spares and repair parts			200,100		116,747
	5. Other support			2,439,300		1,899,199
	Total direct			4,274,600		2,744,275
	Reimbursable program (total)			92,000		34,285
	Total			4,366,600		2,778,560
10.00	Financing:					
	Offsetting collections from:					
	Federal funds			-56,500		-56,500
	Trust funds			-35,000		-35,000
	Non-federal sources			-500		-500
	Unobligated balance available, end of year					1,588,040
24.40	Budget authority (appropriation)			4,274,600		4,274,600

(In Thousands of Dollars)

Program Requirements - FY 1983	- \$7,016,543
Program Requirements - FY 1982	- 4,274,600
Program Requirements - FY 1981	- 3,140,917
Program Requirements - FY 1980	- 2,159,231

#### PURPOSE AND SCOPE OF APPROPRIATION

This appropriation provides for procurement, installation, and checkout of strategic ballistic missiles and other missiles, modification of in-service missiles, and initial and replenishment spares and repair parts for missile systems. It also provides for operational space systems, boosters, payloads, drones, associated ground support equipment, nonrecurring maintenance of industrial facilities, machine tool modernization, and special programs support.

1. Ballistic Missiles - Provides for procurement of the higher yield MK-12A re-entry vehicle to replace the MK-12 re-entry vehicle on 300 MINUTEMAN III missiles and accommodations for ALCS, AFSATCOM, 616A, and SACDIN equipment in MINUTEMAN and TITAN launch control centers.
2. Other Missiles - Provides for procurement of Air and Ground Launched Cruise Missiles, peculiar support equipment, and training equipment. Procurement of the AIM-7F/M SPARROW and the AIM-9L/M SIDEWINDER, continues in FY 1982 and FY 1983. Provides for target drones, for missiles testing and aircrew training. FY 1982 initiates procurement of the AGM-65D, MAVERICK, and requests authorization in FY 1983 to initiate procurement of AGM-88 HARM air-to-ground missile and Tactical Drones.
3. Modification on In-Service Missiles - Provides modification of missiles to improve reliability and safety, extend service life, and to incorporate operational improvements based on in-service use.
4. Spares and Repair Parts - Provides for initial and replenishment spare and repair parts for ballistic missiles, other missiles, remotely piloted vehicles (RPV), peculiar support equipment, replacement equipment, provisioning documentation, and spares for the modification programs.
5. Other Support - Provides for special program activities, modernization of government-owned production facilities, procurement of launch vehicles, spacecraft, and peculiar support equipment for operational space systems.

# SUMMARY OF REQUIREMENTS

	(In Thousands of Dollars)		
	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
Ballistic missiles.....	\$ 108,500	\$ 141,990	\$ 106,600
Other missiles.....	607,090	916, 900	1,431,800
Modification of in-service missiles.....	52,200	104,552	96,800
Spares and repair parts.....	95,600	146,091	200,100
Other support.....	1,295,841	1,831,384	2,439,300
TOTAL DIRECT PROGRAM.....	2,159,231	3,140,917	4,274,600
Reimbursable program.....	42,857	61,223	
TOTAL PROGRAM REQUIREMENTS (CURRENT).....	2,250,505	3,235,398	4,366,600
Less: Portion of program to be obligated			
In subsequent fiscal years.....	601,501	1,156,861	1,588,040
Plus: Obligations incurred against prior			
year program funds.....	413,596	528,463	1,017,160
TOTAL OBLIGATIONS.....	\$2,062,600	\$2,607,000	3,795,720



# SUMMARY OF PROGRAM REQUIREMENTS

	(In Thousands of Dollars)
	FY 1983 Estimate
Ballistic missiles.....	1,766,146
Other missiles.....	2,054,993
Modification of in-service missiles.....	121,134
Spares and repair parts.....	254,311
Other Support.....	2,819,959
TOTAL DIRECT PROGRAM.....	7,016,543

ACTIVITY: 1. Ballistic Missiles

(In Thousands of Dollars)

Program Requirement - FY 1983 -	\$1,766,146
Program Requirement - FY 1982 -	106,600
Program Requirement - FY 1981 -	141,990
Program Requirement - FY 1980 -	108,500

PART I - PURPOSE AND SCOPE

This activity provides for complete operational intercontinental ballistic missiles, including the airframe structure and installed power units, communications guidance and control equipment, re-entry vehicle (excluding nuclear payloads), instruments and auxiliary equipment installed in the missiles, and penetration aids. It also provides for peculiar ground support equipment in direct support of operational ballistic missiles including ground guidance and control systems, equipment to maintain the operational status of the system, specialized ground handling equipment, and system trainers. The ground equipment is used to transport, assemble and disassemble, maintain, checkout, launch, and guide ballistic missiles. The specialized training equipment includes system trainers for proficiency training of maintenance and operator crews. This activity also provides for the modernization of the ballistic missile launch and launch control facilities and the integration of new equipment into the launch control center. It includes hardware, training equipment, data and site activation effort required to modernize ballistic missile facilities.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The MINUTEMAN missile is a three stage solid propellant intercontinental Ballistic Missile (ICBM), hardened and dispersed in underground silos to survive an attack by the enemy and retain a capability to perform the assigned mission. MINUTEMAN II carries one re-entry vehicle and has the capability to carry chaff and penetration aids to defeat area type defenses. MINUTEMAN III has a Post Boost Vehicle for the deployment of two or three MK-12 re-entry vehicles and chaff. The FY 1982 request provides funds to complete procurement of the MK-12A re-entry vehicle as a replacement for the MK-12 on 300 MINUTEMAN IIIs. The higher yield of the MK-12A will provide MINUTEMAN with an improved capability against targets designated by the Single Integrated Operational Plan. Funds are also included for the Air Launch Control System (ALCS) Phase III on 200 MINUTEMAN III missiles. Under ICBM C3 Integration, procurement will be continued for MINUTEMAN and TITAN launch control center accommodations for installation of Air Force Satellite Communications system, Strategic Air Command Digital Network, 616A equipment. These added capabilities will increase the reliability of emergency war order reception. The FY 83 request completes the ICBM C3 Integration. There are no funds for MK-12A procurement. It also funds the initial procurement of nine MX missiles. (RDT&E PE 11213F, 11215F, 64312F)

The following tabulation shows the composition of ballistic missile program requirement:

	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>
Weapon System Cost	\$ 92,000	\$ 89,416	\$ 38,945	\$1,716,856
Advance Procurement (PY-)	-9,700	-4,800	-3,644	
Current Year Program	82,300	84,616	35,301	
Advance Procurement (CY +)	4,800	3,644		
WEAPON SYSTEM TOTAL	87,100	88,260	35,301	1,716,856
(Procurement Quantity)				
ICBM C3 Integration	21,400	53,730	71,260	49,290
TOTAL BUDGET ACTIVITY	\$108,500	\$141,990	\$106,600	\$1,766,146

ACTIVITY: 2. Other Missiles

(In Thousands of Dollars)

Program Requirements - FY 1983 -	\$2,054,993
Program Requirements - FY 1982 -	\$1,431,800
Program Requirements - FY 1981 -	\$ 916,900
Program Requirements - FY 1980 -	\$ 607,090

PART I - PURPOSE AND SCOPE

This activity provides funds for the weapon system cost for procurement of strategic air-to-ground and ground-to-ground missiles, tactical air-to-air and air-to-ground missiles and target drones. Weapon system cost includes flyaway costs (air-frame, propulsion equipment, electronics and armament) peculiar support equipment (PSE), system peculiar training equipment and publications and technical data.

PART II- JUSTIFICATION OF FUNDS REQUESTED

The FY 1982 budget estimate includes requests for funds for the procurement of the Air Launched Cruise Missile (ALCM), the Ground Launched Cruise Missile (GLCM), the SPARROW and SIDEWINDER air-to-air tactical missiles, Maverick and HARM air-to-ground missiles, RAPIER air base defense missiles, and target drones. Descriptions and justification for the requests follow:

AGM-86B ALCM - The ALCM is a small, long range, accurate, nuclear armed, air-to-ground cruise missile planned for use on the B-52G bomber. The missile is internally guided by an inertial navigation system which is updated by terrain contour matching.

The ALCM will expand the lethal footprint of penetrating strategic bomber forces by providing additional target coverage and routing flexibility and by stressing enemy defenses. FY 82 funds will procure 440 missiles and support equipment. The FY 1983 request is also for 440 missiles. (RDT&E PE64301F, 111225)

BGM-109 GLCM -The GLCM is a small, long range, accurate, ground-to-ground cruise missile which will provide increased firepower for theater forces and release Quick Reaction Alert aircraft to participate in the conventional role. The cruise missile will combine with command, control, communication, and launch control hardware software to comprise the weapon system. FY 1982 funds will cover procurement of 54 missiles and support equipment. The FY 1983 request is for 120 missiles. (RDT&E PE64362F, 27314F)

AIM-7M SPARROW - The Sparrow is a rocket propelled air-to-air missile guided by a solid state radar homing device with dual mode continuous wave or pulse doppler. The AIM-7M was developed to provide for defense against enemy aircraft and to maintain air superiority. The funds requested for FY 1982 will procure 1060 missiles. The request for FY 1983 is for 1430 missiles. (RDT&E PE 27161F)

AIM-9M SIDEWINDER - The SIDEWINDER is designed for close-in "dogfight" combat against highly maneuverable fighter aircraft. Designed for visual attack, the SIDEWINDER has an infrared seeker with solid electronics, an active optical fuze, and an annular blast fragmentation warhead, all combining to result in increased lethality. The funds requested for FY 1982 will procure 480 improved "M" versions of the missile, featuring improved guidance and control and reduced smoke rocket motor. The FY 83 request is for 1920 missiles (RDT&E PE 27161F)

AGM-65D MAVERICK - The AGM-65D version of the MAVERICK missile incorporates Imaging Infrared (IR), using thermal detection technology to provide an effective 24 hour day/night/adverse weather weapon. The FY 1982 request will procure the first 490 missiles. The FY 1983 request is for 3660 missiles. (RDT&E PE 64608F, 27313F)

Target Drones - Target Drones are remotely piloted vehicles which are used to simulate subsonic and supersonic enemy aircraft. They are used to develop air-to-air missile tactics, train aircrews, and to test and evaluate aircraft and missile weapon systems. The funds requested for FY 1982 will provide for the continued procurement of full scale and sub-scale maneuvering target drones. The FY 1983 request continues procurement to include the HAHST. (RDT&E, 64211F, PE 35116F)

AGM-88A HARM - The HARM is an air-to-surface anti-radiation missile designed to damage or suppress radar-directed air defense system. Advanced feature include moderate size and weight, high speed, high accuracy, high sensitivity, wideband frequency coverage in a single seeker, long stand off range

There are no procurement funds requested in FY 1982. The FY 1983 authorization requested will procure the first 286 missiles for the Air Force. (RDT&E PE 27162F)

RAPIER - A short range, low level, all weather, surface to air defense missile system. It is produced in the United Kingdom (UK) and will be used to defend air bases in the UK. The FY 1982 request will continue the procurement started in FY 1981. FY 1983 continues procurement of the system. (RDT&E PE 27315F)

MRASM - A medium range all weather air to surface missile to attack heavily defended high value targets. There are no procurement funds requested in FY 1982. The FY 1983 authorization request will start the production effort. (RDT&E PE64614F)

Tactical Drones - A small expendable unmanned aircraft named the LOCUST will be used as a low cost air defense suppression system. It will carry a radar sensor for target acquisition and a fragmentary warhead to damage/destroy enemy air defense systems. It will be ground launched and will operate autonomously, requiring no data link for command and control. There are no procurement funds requested in FY 1982. The FY 1983 authorization requested will start the production effort. (RDT&E PE64746F)

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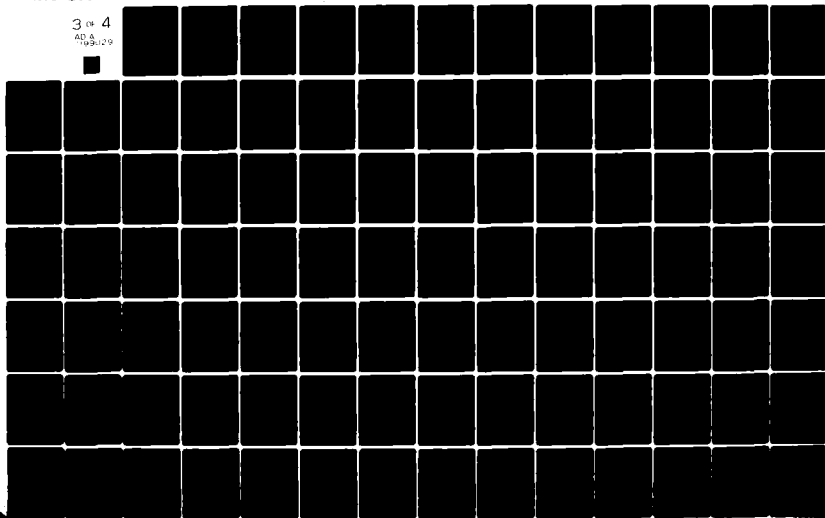
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DEPARTMENT OF THE AIR FORCE JUSTIFICATION OF ESTIMATES FOR FISC--ETC(U)  
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The following table summarizes Other Missiles requirements:

Weapon System	(In Thousands of Dollars)			
	FY 1980	FY 1981	FY 1982	FY 1983
Air Launched Cruise Missile (ALCM)				
Ground Launched Cruise Missile (GLCM)				
MRASM	\$365,380	\$551,688	\$ 595,387	\$ 597,958
AIM-7F/M Sparrow	8,200	89,389	331,763	470,609
AIM-9L/M Sidewinder				7,168
AGM-65A Maverick	125,110	139,900	144,411	173,497
AGM-65D Maverick (IR)	86,800	44,074	53,713	123,051
AGM-88A Harm	5,100			
Rapier			199,979	349,944
Target Drones		90,000	85,974	117,778
Tactical Drones	16,500	1,849	20,573	127,987
				61,260
				25,741
TOTAL	\$607,090	\$916,900	\$1,431,800	\$7 054,993



ACTIVITY: 3. Modification of In-service Missiles

(In Thousands of Dollars)  
Program Requirements - FY 1983 - \$121,134  
Program Requirements - FY 1982 - \$ 96,800  
Program Requirements - FY 1981 - \$104,552  
Program Requirements - FY 1980 - \$ 52,200

PART I - PURPOSE AND SCOPE

This activity provides for modification of missile systems and drones, direct ground support equipment, missile training equipment, and components of these equipments. These costs include modification kits, revised handbooks, and engineering effort. These programs are designed to improve reliability, enhance performance, and increase maintainability by incorporating approved modifications resulting from technical advances, service use, and continuing test programs.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1982 modification program consists of missile systems Class IV modifications which are necessary for safety improvements, extension of service life, to incorporate operational improvements after a missile has been placed in the inventory, and an update modification to convert AIM-7F Sparrow missiles to the production line configuration. Advances in technology and long retention necessitate the modification of in-service missile systems to enable the strategic, tactical, and support forces to maintain superiority over hostile forces. The modification program was reviewed to determine the priority of essential mission requirements for inclusion in the FY 1982 Budget Request.

Class IV Modification (FY 1982 \$82,663, FY 1983 \$92,128) The FY 1982 program will provide for modifications to improve reliability, maintainability, and extend service life of the AGM-45 Shrike, AIM-4 Falcon, LCM-25 TITAN, LGM-30 MINUTEMAN, and the Emergency Rocket Communications System. The FY 1983 program will continue modifications on these systems, initiate modifications to the BQM-34 Target Drone, and update modifications to the Ground Launched Cruise Missile (GLCM) as it enters the operational inventory.

AIM-7F Sparrow Update (FY 1982 \$14,137, FY 1983 \$19,906) This program provides for the correction of deficiencies detected during follow-on operational test and evaluation.

GLCM (FY 1982 -0-, FY 1983 \$9,100) This program provides for the correction of deficiencies revealed during operational test and initial use.

The following table summarizes modification update requirements:

<u>REQUIREMENT</u>	<u>FY 1980</u>	(In Thousands of Dollars) <u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>
Class IV Modifications (Includes NFIP)				
Class V Modifications:				
CIN-10 BOMARC	\$41,487	\$ 72,635	\$ 82,663	\$ 92,128
LCN-30 F/G MINUTEMAN II/III	1,013	24,726		
Update:				
AIM-7E Sparrow	9,700	7,191	14,137	19,906
GLCM				9,100
TOTAL	\$52,200	\$104,552	\$96,800	\$121,134

ACTIVITY: 4. Spares and Repair Parts

(In Thousands of Dollars)  
Program Requirements - FY 1983 - \$254,311  
Program Requirements - FY 1982 - \$200,100  
Program Requirements - FY 1981 - \$146,091  
Program Requirements - FY 1980 - \$ 95,600

PART I - PURPOSE AND SCOPE

This activity provides for procurement of initial and replenishment spares and repair parts for ballistic missiles, other missiles, target drones, peculiar support equipment, training equipment, replacement equipment, provisioning documentation, and spares for modification programs.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The funds for FY 1982 and FY 1983 will provide for the procurement of initial spares, replacement equipment, and replenishment spares. Initial spares are investment type items normally procured in support of the weapon system delivery schedule. Replacement equipment includes peculiar support equipment in support of out-of-production systems, equipment common to several systems, and equipment required by specialized repair activities. Replenishment spares include components and repair parts required for the continued support of missiles, drones and related support equipment maintained in the operational inventory. The FY 1982/83 requirements for spares and repair parts were developed by detailed provisioning actions which consider operational deployment of the end item, usage rate trends and, for time-change items, the service life of the weapon system.

The breakdown of Spares and Repair Parts requirements follows:

INITIAL SPARES (I/S)	(In Thousands of Dollars)			
	FY 1980	FY 1981	FY 1982	FY 1983
Minuteman, Weapon System				
MX	\$ 700	\$ 720	\$ 534	
Sparrow	400	2,673	8,321	59,328
Sidewinder	100	2,261	5,493	7,975
Air Launched Cruise Missile	6,900	27,944	10,030	5,797
Ground Launched Cruise Missile		9,451	23,316	13,720
Imagining Infra-Red Maverick			4,180	4,733
HARM				7,744
TAC Trones				13,925
Target Drones	700	205	1,256	2,359
Rapier			9,212	6,806
TOTAL	\$ 8,800	\$ 43,254	\$ 62,342	\$136,721
Modification I/S	1,630	2,669	2,866	2,669
Replacement Equipment	31,770	33,903	40,558	35,284
Replenishment Spares	53,400	66,265	94,334	79,637
TOTAL SPARES & REPAIR PART	\$95,600	\$146,091	\$200,100	\$254,311

ACTIVITY: 5. Other Support

(In Thousands of Dollars)  
Program Requirements - FY 1983 - \$2,819,959  
Program Requirements - FY 1982 - \$2,439,300  
Program Requirements - FY 1981 - \$1,831,384  
Program Requirements - FY 1980 - \$1,294,481

PART I - PURPOSE AND SCOPE

This activity provides for industrial facilities, space programs, and special programs. Industrial facilities provide for expansion or modification of government-owned production facilities, nonrecurring maintenance and modernization of machine tools and equipment, preparation, crating, and shipping of government tools, improved manufacturing methods, and environmental protection measures instituted at government-owned plants. Space programs provide launch vehicles, space vehicles, peculiar ground support equipment, and miscellaneous launch support requirements other than those chargeable to the Operations and Maintenance appropriation.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1982 budget request of \$2,439,300 includes \$870,994 for operational space programs, \$16,073 for industrial facilities, and \$1,553,133 for special programs. The FY 1983 request for authorization of \$2,819,959 includes \$1,080,148 for operational space programs, \$19,026 for industrial facilities and \$1,720,785 for special programs.

COMSEC - This program supports the national objective of providing communications security on all critical spaceborne communications systems. Tasks under this program apply technology to develop COMSEC products for use in Air Force weapon systems, and supports the Air Force Security Secure Tempest Testing and Analysis program. This program is an integral part of the national COMSEC program, which is administered by the National Security Agency. The FY 1982 and FY 1983 funds provide for the procurement of peculiar communications equipment for the program. (RDT&E PE33401F)

NAVSTAR Global Positioning System (GPS) - The operational NAVSTAR GPS will consist of 18 satellites, a ground control station and approximately 25,000 sets of user equipment for all services. Each user will be able to precisely determine his position (to better than twenty meters average accuracy) and velocity (to a few centimeters per second), in three dimensions, anywhere in the world, unimpaired by weather. The FY 1982 funds provide for the procurement of two operational spacecraft. FY 1983 procures three satellites. (RDT&E PE64778F, 35165F)

Space Launch Support - The Space Launch Support program provides the Inertial Upper Stages (IUS), Payload Assist Modules-Delta Class (PAM-D), and spares support for all Air Force operational space programs (excluding Support Missions) launching on the Space Shuttle. Operational programs include the Defense Support Program, the Defense Satellite Communications System, the Space Based Surveillance System, and the NAVSTAR Global Positioning System.

The 34.6 million dollars requested in Fiscal Year 1982 will provide funds to procure one IUS and necessary spares for Interface Verification Equipment, Airborne Support Equipment, and the Vandenberg Air Force Base Shuttle launch processing system. In Fiscal Year 1983 funds will be requested to procure additional IUS and PAM-D stages to support operational launch requirements; to provide necessary spares for Interface Verification Equipment, Airborne Support Equipment, and the Vandenberg AFB Shuttle launch processing system; and to procure required Airborne and Ground Support Equipment for the PAM-D. (RDT&E PE63411F, 64411F, 35171F)

Satellite Data System (SDS) - The SDS is a multi-purpose communications system which in conjunction with the Navy Fleet Satellite Communications Program (FLTSATCOM) has the high priority mission of supporting communications for the strategic forces and between Air Force Satellite Control Facility ground stations. The FY 1982 funds will provide a continuing replenishment launch capability, advance procurement for one satellite, and satellite readiness configuration testing. The FY 1983 request for authorization is for the procurement of one satellite, contractor orbital incentives, launch support services, satellite modifications and propellants. (RDT&E PE35158F)

Defense Meteorological Satellite Program (DMSP) - DMSP is a joint Service program which is DOD's most important single source of weather data. It is an advanced weather satellite system which supports both strategic and tactical missions. Two DMSP satellites provide worldwide, high quality visual and infrared cloud imagery and other specialized meteorological data four times a day. Worldwide data are provided to the Air Force Global Weather Central at Offutt AFB, Nebraska, and to the Navy's Fleet Numerical Weather Central at Monterey, California. Local area cloud imagery data are transmitted for immediate use directly from the satellites to mobile Air Force and Navy tactical receiving terminals at key worldwide operating locations and onboard aircraft carriers at sea.

In Fiscal Year 1982, 38.0 million dollars are programmed to procure special sensors to provide meteorological and ionospheric data, to modify one Atlas Booster to support a Fiscal Year 1982 launch, and to encrypt command and telemetry links for spacecraft to be launched in Fiscal Year 1983 and beyond. Fiscal Year 1983 funds will provide for satellite modifications and procure additional special sensors which provide data to enhance the usefulness of the imagery. (RDT&E PE35160F)

Defense Support Program (DSP) - The DSP satellites contain sensors which provide near real-time data to the National Command Authorities and other designated users. The FY 1982 funds initiate a block buy of four satellites with incremental funding through FY 1986. (RDT&E PE 12431F)

Defense Satellite Communications System (DSCS) - The DSCS provides Super High Frequency (SHF) satellite communications for secure voice and high data rate transmissions in support of unique and vital national security requirements for worldwide military command and control, crises management, intelligence data relay, early warning detection, overall DSCS program management, systems engineering, orbital operations, and satellite communications architecture. The DSCS program consists of a space segment, which is an Air Force responsibility, a multi-user terminal segment of ground, airborne, and naval elements, and an operational control segment. The authorized DSCS space segment consists of four operational and two in-orbit spare satellites positioned over four geographical areas to provide global (less polar) coverage. Existing DSCS II satellites will be replenished with DSCS III satellites which will provide increased channelization, flexibility, and anti-jam capability. DSCS III satellites will include an UHF and, in future, SHF capability for Emergency Action Message dissemination. Earth terminals to meet Air Force communications requirements are procured through the U.S. Army.

The FY 81 funds provided for the acquisition of four sets of advance buy items for two DSCS III production satellites to be acquired in FY 1982 and three in FY 1983. The FY 1982 funds will provide for the acquisition of two DSCS III production satellites, expendable launch vehicle support for propellants, engineering change orders, and partial payment for boosters previously procured. It also funds two AFSATCOM Single Channel transponders for these satellites. The funds for this effort were transferred in FY 1982 from the AFSATCOM program to the DSCS program element. In the future, 1983 and beyond, requests for funding for the AFSATCOM transponders to be integrated with the DSCS III production satellites will also be included as part of the DSCS request. Both the DSCS III spacecraft and the transponder are developed and acquired from the same contractor under the same contracts. In FY 1983, three DSCS III production satellites will be acquired and launch vehicle first time integration, launch vehicle support, solid state amplifier development, and shuttle compatibility modifications will continue. (RDT&E PE33110F)

Air Force Satellite Communications System (AFSATCOM) - The AFSATCOM system is a satellite based Ultra High Frequency Communications system with transponders carried as secondary payloads on host spacecraft. The AFSATCOM system provides communications between the National Command Authorities, the JCS, the military CINCs and the nuclear capable forces. The FY 82 request was transferred to the DSCS III program to facilitate funding and procurement actions and is consistent with other host program procurement procedures. (RDT&E PE33601F)

Space Boosters - The Space Boosters program provides an austere expendable launch vehicle backup to guarantee the launch of critical USAF operational payloads in the event that the Space Shuttle program is delayed or the orbiter fleet is grounded.

The 65.4 million dollars requested in Fiscal Year 1982 will provide funds for advance buy of materials (36.8 million dollars) needed to produce two additional Titan III(34)D backup boosters and for production (28.6 million dollars) of two sets of Titan III(34)D liquid rocket engines as part of the effort to further extend maintenance of critical Titan III production capability past the current Space Shuttle operational data (September 1982) and into 1983.

In Fiscal Year 1983 funds will be requested to complete the two Titan III(34)D vehicles using advance buy materials procured in Fiscal Year 1982. This supports the efforts to maintain critical Titan III production capability into 1983. As was the case with the previous efforts to maintain critical production capability, incremental decision points keyed to critical Shuttle development milestones will be used to advance these two vehicles through major production stages. Fiscal Year 1983 funds to support phaseout of certain Titan III production capability, no longer required, will also be requested. (RDT&E PE35119F)

Space Shuttle - The Space Shuttle is a NASA development program to provide an advanced, reusable, manned orbiter vehicle which will be capable of transporting payloads to low earth orbit. To carry payloads to higher operational orbits, the Air Force will build an unmanned Inertial Upper Stage (IUS). By Executive direction, the Air Force will: 1) provide a shuttle launch and landing capability at Vandenberg AFB, CA; 2) develop the Inertial Upper Stage; 3) transition DOD payloads to the shuttle; 4) support NASA development efforts and make sure the shuttle meets DOD requirements. The IUS will be used by both DOD and NASA. The funds requested for FY 1982 and FY 1983 provide for the procurement of common and unique support equipment for command and control of classified DOD missions and the Vandenberg AFB (VAFB) shuttle launch site, the VAFB Launch Processing System equipment, the unique ground and airborne support equipment for the IUS and the initial spares to support this equipment. (RDT&E PE64311F, 64411F, 12449F)



A summary of the funding requirements for space programs is as follows:

	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>
COMSEC				
NAVSTAR GPS				
Space Launch Support	\$ 20,509	\$ 15,924	\$ 20,037	\$ 14,238
Satellite Data System	21,905	719	78,605	108,431
Defense Meteorological Satellite Program	100,223	95,468	34,567	86,648
Defense Support Program	25,400	43,355	43,159	161,883
Defense Satellite Communications System	103,862	52,704	37,956	37,007
Air Force Satellite Communications System	17,300	81,565	237,057	200,260
Space Boosters	192	8,165	134,628	211,554
Space Shuttle	44,000	68,150	65,445	14,123*
	137,446	118,600	218,640	132,088
TOTAL SPACE PROGRAMS	\$470,837	\$484,650	\$870,094	\$1,080,148

\* Will be transferred to DSCS program element.

Industrial Facilities (FY 82, \$16,073; FY 83 \$19,026) - This is a continuing program with government owned properties which includes requirements for plant expansions; packing crating, and handling of plant equipment; rehabilitation; environmental protection, manufacturing methods; and energy conservation.

Special Programs (FY 82, \$1,553,133; FY 83, \$1,720,785). Special Program requirements are of a sensitive nature requiring special access. (Includes NFIP & Special Update)

COMPARISON OF FY 1982 PROGRAM REQUIREMENTS AS REFLECTED  
IN FY 1981 BUDGET WITH FY 1982 PROGRAM REQUIREMENTS AS  
SHOWN IN FY 1982 BUDGET

SUMMARY OF PROGRAM REQUIREMENTS

	(In Thousands of Dollars)		
	Program Requirements Per 1981 Budget	Program Requirements Per 1982 Budget	Increase (+) or Decrease (-)
Ballistic Missiles	\$ 98,574	\$ 106,600	\$+ 8,026
Other Missiles	1,265,084	1,431,800	+166,716
Modification on In-Service Missiles	132,906	96,800	-36,106
Spares and Repair Parts	151,793	200,100	+48,307
Other Support	<u>2,268,211</u>	<u>2,439,300</u>	<u>+171,089</u>
Total Fiscal Year Program	3,916,568	4,274,600	+358,032

1. Ballistic Missiles (\$+8,026) This increase was caused by a combination of adding the Air Launch Control System Phase III to the FY 82 Budget and changes caused by revised economic escalation indices.

2. Other Missiles (\$+166,716) This net increase was due to revised economic escalation indices and the following program changes: Air Launched Cruise Missiles (\$+84,340) Increase was caused by a repricing during the production decision process and the addition of warranties. Ground Launched Cruise Missile (\$+88,329) Increase due to a repricing of the production estimates and the addition of three transporter/erector/launches to the buy. AIM-7F/M Sparrow (\$+26,668) Increase is due to revised economic escalation indices and increased quantities. AIM-9L/M Sidewinder (\$+13,048) Increase is due to increased quantities and revised escalation indices. Target Drones (\$+1,473) Increase due to revised economic escalation indices. AGM-65D Maverick (\$+8,025) Increase due to revised economic escalation indices. Rapier (\$+85,974) was not included in the FY 81 Budget.

The following programs decreased because initiation of procurement was deferred until FY 1983: AGM-88A HARM (\$-136,144) Tactical Drones (\$-4,997)

3. Modification of In-Service Missiles (\$-36,106) Class IV funds had a net increase of (\$ +9,781). Major changes were increases to various Titan and Minuteman ICBM modifications partially offset by reductions in classified programs and SRAM modification requirements. Minuteman extended survivable power (\$-52,912) was cancelled and the AIM-7 Sparrow update quantities were increased (\$+7,025).
4. Spare and Repair Parts (\$+48,307) This increase reflects the increasing requirement to support and replace aging equipment to fill supply pipelines to increase readiness and to support new systems entering the inventory.
5. Other Support (\$+171,089) Major changes were related to: DMSP (\$+16,855) increased to modify spacecraft and an Atlas Booster; DSP (\$+44,777) increased as a result of a departure from the full funding concept to a tailored acquisition policy and incremental funding of a block buy of 4 spacecraft; DSCD (\$+21,388) increased due to a change in the Satellite procurement profile to buy 2 spacecraft, 4 sets of advance buy parts and to fund the AFSATCOM sensors in the DSCS live in keeping with other host program procurement policy; Space Boosters (\$+65,445) increased to buy two more additional back-up Titan 34D/IUS Boosters; Space Shuttle (\$+108,409), slips in the 80 and 81 procurement programs resulting from NASA delays in the shuttle program caused this increase; Special Program (\$-85,785) decrease caused by changes in program requirements in this Special Access area.

COMPARISON OF FY 1981 PROGRAM REQUIREMENTS AS REFLECTED  
IN FY 1981 BUDGET WITH FY 1981 PROGRAM REQUIREMENTS AS  
SHOWN IN FY 1982 BUDGET

SUMMARY OF PROGRAM REQUIREMENTS

	(In Thousands of Dollars)		
	Program Requirements Per 1981 Budget	Program Requirements Per 1982 Budget	Increase (+) or Decrease (-)
Ballistic Missiles	\$ 141,990	\$ 141,990	\$ N/C
Other Missiles	804,624	916,900	+12,276
Modification of In-Service Missiles	99,552	104,552	+5,000
Spares and Repair Parts	146,091	146,091	N/C
Other Support	1,885,327	1,831,384	-53,943
Reimbursables	<u>61,223</u>	<u>94,481</u>	<u>+33,258</u>
Total Fiscal Year Program	\$3,138,807	\$3,235,398	\$ +96,591

1. Ballistic Missiles No change.
2. Other Missiles (+112,276) Funds for the Rapier air base defense missile system were added (\$+90,000) and (\$22,276) was added to the AIM-7M Sparrow.
3. Modification of In-Service Missiles (\$+5,000) funds were added by the Congress for Minuteman survivable power program.
4. Spares and Repair Parts No change.
5. Other Support (\$-53,943) Congressional actions and program changes decreased the following programs; DSCS (\$-11,475), AF-SATCOM (\$-5,299), Space Shuttle (\$-12,493), Special Programs (\$-21,707), and various below threshold reprogrammings (\$-2,969).

COMPARISON OF FY 1981 FINANCING AS REFLECTED  
IN FY 1981 BUDGET WITH FY 1981 FINANCING AS  
SHOWN IN FY 1982 BUDGET

	(In Thousands of Dollars)		
	Financing Per FY 1981 Amended Budget	Financing Per FY 1982 Budget	Increase (+) or Decrease (-)
Program requirements.....	3,138,807	3,235,398	+96,591
Program requirements (Service account).....	(3,077,584)	(3,140,917)	(+98,633)
Program requirements (Reimbursable).....	(61,225)	(94,481)	(+33,258)
Less:			
Anticipated reimbursements.....	61,223	94,481	+33,258
Appropriation.....	3,077,584	3,140,917	+63,333

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1981 program has been increased \$96,591 thousand since submission of the FY 1981 budget. Adjustments by category are explained below:

Anticipated Reimbursements. The increase is due to a revised estimate of customer orders in FY 1981.

COMPARISON OF FY 1980 PROGRAM REQUIREMENTS AS REFLECTED  
IN FY 1981 BUDGET WITH FY 1980 PROGRAM REQUIREMENTS AS  
SHOWN IN FY 1982 BUDGET

SUMMARY OF PROGRAM REQUIREMENTS

	(In Thousands of Dollars)		Increase (+) or Decrease (-)
	Program Requirements Per 1981 Budget	Program Requirements Per 1982 Budget	
Ballistic Missiles	\$ 108,500	\$ 108,500	\$ N/C
Other Missiles	609,700	607,090	-2,610
Modification of In-Service Missiles	72,800	52,200	-20,600
Spares and Repair Parts	94,900	95,600	+700
Other Support	1,294,485	1,295,841	+1,356
Reimbursable Program	42,857	91,274	+48,417
Total Fiscal Year Program	2,223,242	2,250,505	+27,263

EXPLANATION BY BUDGET ACTIVITY

1. Ballistic Missiles (N/C)
2. Other Missiles (\$-2,610) Was transferred to the other procurement appropriation.
3. Modification of In-Service Missiles (\$-20,600) Funds were reprogrammed for Minuteman to the RDT&E appropriation to cover shortfalls (\$-10,700) and (\$-10,200) to offset high inflation. Minor increases totaling (\$300) were made in several programs.
4. Spares and Repair Parts (\$+700) Funds were added for inflation.
5. Other Support (\$+1,356) Internal reprogramming actions accounted for an increase in DMSP (\$+3,800), and a decrease in space launch support (\$-4,000). A slip in the NASA space shuttle program caused the AF to slip VAFB to FY 81 (\$-25,054). A decision to buy additional space boosters in FY 81 increased the advance buy line (\$+21,000), and changes in Special Programs increased the line by \$+5,610.

COMPARISON OF FY 1980 FINANCING AS REFLECTED  
IN FY 1981 BUDGET WITH FY 1980 FINANCING AS  
SHOWN IN FY 1982 BUDGET

	(In Thousands of Dollars)		
	Financing Per FY 1981 Amended Budget	Financing Per FY 1982 Budget	Increase (+) or Decrease (-)
Program requirements.....	2,223,242	2,250,505	+27,263
Program requirements (Service account).....	(2,180,385)	(2,159,231)	(-23,754)
Program requirements (Reimbursable).....	(42,857)	(91,274)	(+48,417)
Less:			
Anticipated reimbursements.....			
Reappropriation.....	42,857	91,274	+48,417
Transferred from other accounts.....	15,000	31,400	+16,400
	7,600	8,200	+600
Add:			
Transferred to other accounts.....	a/ 2,600	40,754	+38,154
Appropriation.....	2,160,385	2,160,385	-
a/ Includes proposed transfer of \$2,600 to finance the FY 80 Supplemental Amendment			

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1980 program has been increased \$27,263 thousand since submission of the FY 1981 budget. Adjustments by category of financing are explained below:

1. Anticipated Reimbursements. The increase of \$48,417 thousand is due to receipt of actual customer orders in FY 1980.
2. Reappropriation. The increase of \$16,400 thousand is a transfer from FY 1980 RDT&E to finance FY 1980 by Congressional direction specified in P.L. 96-154.
3. Transferred from Other Accounts. The increase of \$600 thousand is a transfer from Aircraft Procurement, Air Force, FY 1980.
4. Transferred to Other Accounts. \$10,000 thousand was transferred to 0300, 0400, FY 1980; \$9,500 thousand was transferred to 3400, FY 1980; \$10,254 thousand was transferred to 3600, FY 1980; and \$11,000 thousand was transferred to 3500, FY 1980. All transfers were in accordance with Section 734 of the DoD Appropriation Act of 1980.



# ANALYSIS OF UNOBLIGATED BALANCES - 30 SEPTEMBER 1982

## SUMMARY BY CATEGORY (In Millions of Dollars)

	<u>FY 1981</u>	<u>FY 1982</u>	<u>Total</u>	<u>% of Total Unobligated</u>
1. <u>Military Interdepartmental Purchase Requests:</u> (MIPRs) . . . . .	\$43.5	\$225.5	\$269.0	14.2%
2. <u>Completing Contractual Arrangements:</u>				
a. Specification Definitions . . . . .	3.6	19.1	22.7	1.2%
b. Price Redeterminations . . . . .	38.6	200.1	238.7	12.6%
c. Definitization of Contracts . . . . .	93.0	482.8	575.8	30.4%
3. <u>Full Funding Policy:</u>				
a. Delayed/Revised Program Release . . . . .	106.6	552.6	659.2	34.8%
b. Engineering Changes . . . . .	20.9	107.9	128.8	6.8%
TOTAL UNOBLIGATED FY 1982	\$306.2	\$1,588.0	\$1,894.2	

## EXPLANATION

Procurement funds are available for obligation for three years because of the extensive lead time required to develop detailed specification, issue Requests for Proposals (RFPs) and to negotiate and finalize contracts for procurement of investment equipment. Unobligated balances are required for programmed and needed items on which contracts have not reached the obligational stage by the end of the fiscal year because of the procurement process.

The following are illustrative of the reasons which will cause unobligated balances at the end of each fiscal year:

1. Military Interdepartmental Purchase Requests (MIPRs) (\$269.0 million) - These documents are used to request one of the other military services to procure Air Force requirements in conjunction with their own or with those of another service. Funds to support these requests remain unobligated until notification of contract award is received from the other military service. Frequently, contractual arrangements will have been completed and the obligation incurred but notification from the other service is not received in time for recording in Air Force records prior to or at the end of a fiscal year.

2. Completing Contractual Arrangements:

a. Specification Definitions (\$22.7 Million) - Unobligated funds result when specifications for newly introduced items cannot be definitized in time to permit contract negotiation prior to or at the end of the fiscal year.

b. Price Redeterminations (\$238.7 million) - Prices are redetermined at intervals throughout the life of a contract. Final obligation for contracts must await negotiations on agreed target-ceiling formulae. In most large contracts, the rewards and penalties of multiple incentives (cost, performance and schedule) cannot be determined and obligated prior to the end of the fiscal year. Funds are reserved for these purposes when upward adjustments seem likely; however, obligation does not occur until a formal redetermination has been agreed upon and the contract amended. Unobligated funds at year end result.

c. Definitization of Contracts (\$575.8 million) - Procurements of complex systems and large material orders may occasionally be initiated under letter contracts. The letter contract generates a partial obligation of the total program value with the balance remaining committed but unobligated pending definitization and negotiation of the detailed contract terms. These actions can carry over the end of a fiscal year and result in unobligated funds.

3. Full Funding Policy - This policy, enunciated in DoD Directive 7200.4 (October 30, 1969) provides that adequate appropriations and funds must be available in a given fiscal year for obligation, committed or set aside in a reserve account in an aggregate amount sufficient to complete the procurement of a specified number of end items and advance procurement for approved programs. Unobligated balances at the end of a fiscal year are a consequence of this policy and accrue in the following categories:

a. Delayed/Revised Program Release (\$659.2 million) - Adjustments in quantities or specifications of other equipment to meet changing situations or to exploit engineering improvements generally require prior approval of reprogramming requests which can delay program release and direction until well into the fiscal year, thus delaying the obligation of funds by the end of the fiscal year. Also, approved and funded programs are sometimes delayed/undirected beyond 30 September pending decision on an aspect of the program that has arisen requiring resolution before proceeding.

b. Engineering Changes (\$128.8 million) - Based on prior experience with systems of like nature and complexities, provision is made in procurement programs, as a percentage of the estimated cost of the item, to cover engineering improvements and design changes which will occur as a result of manufacturing experience of Air Force requirements. Engineering changes are not definitive requirements known in advance and they cannot be obligated until the change is authorized and directed. These changes occur throughout the life of the production contract and result in unobligated balances.

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: LAUNCH CONTROL SET UPDATE, MN-10500C

MODELS OF MISSILES AFFECTED: LGM-25C

DESCRIPTION/JUSTIFICATION: MODIFY THE TITAN II LAUNCH CONTROL SYSTEM (LCS) BY REPLACING THE PRESENT ELEVEN (11) DRAWERS WITH THREE (3) STATE-OF-THE-ART DRAWERS. WEAPON SYSTEM AND MOBILE MAINTENANCE TRAINERS WILL BE UPDATED. PRESENT LCS FAILURE RATE IS EXCESSIVE, SPARES ARE NOT AVAILABLE, INTEGRITY HAS BEEN COMPROMISED THROUGH INDISCRIMINANT PARTS REPLACEMENT AND EXTENSIVE REPAIR AND TRAINING FOR OPERATION AND MAINTENANCE IS REQUIRED.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
	1.8		10	10.0	45	10.4					55	22.2
BASIS FOR COST ESTIMATE:												
NONRECURRING	1.8		1	3.4							1	5.2
KITS			9	1.6	45	8.4					54	10.0
DATA				1.1		.7						1.8
TRAINER				2.8		.1						2.9
SUPPORT EQUIP.				1.0		.2						1.2
TOOLING				.1		1.0						1.1
TOTAL	1.8		10	10.0	45	10.4					55	22.2

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT/FIELD TEAM  
LEAD TIME - 24 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: MODERNIZE FIELD EQUIPMENT, MN-10601B

MODELS OF MISSILES AFFECTED: AIM-4F/G

DESCRIPTION/JUSTIFICATION: REPLACE HIGH FAILURE CONSOLE SUBASSEMBLIES WITH SOLID STATE COMPONENTS. APPROXIMATELY 70% OF ALL CONSOLE SPARE COMPONENTS ARE IN A REPARABLE STATE DUE TO THE NONAVAILABILITY OF CONVENTIONAL VACUUM TUBE TYPE CIRCUIT COMPONENTS. REPAIR IS PRESENTLY BEING ACCOMPLISHED BY CANNIBALIZATION OF SPARE CONSOLE COMPONENTS TO OBTAIN PARTS. MANY CONSOLE SPARE COMPONENTS HAVE BEEN CANNIBALIZED TO THE POINT OF CONDEMNATION.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	COST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	2	2.2	12	4.5	1	.4	5	2.0			20	9.1
KITS	2	.7	12	4.5	1	.4	5	2.0			20	7.6
DATA		1.5										1.5
TOTAL	2	2.2	12	4.5	1	.4	5	2.0			20	9.1

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR/FIELD TEAM(S)  
LEAD TIME - 12 MONTHS



MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: MODIFY VAPOR DETECTION SYSTEM, MN-105168

MODELS OF MISSILES AFFECTED: LGM-25C

DESCRIPTION/JUSTIFICATION: THE PROPELLANTS USED IN TITAN ARE EXTREMELY TOXIC. THE CURRENT SYSTEM IS BECOMING INCREASINGLY DIFFICULT TO MAINTAIN AND OSHA HAS PROPOSED MUCH LOWER THRESHOLD LIMIT VALUES (TLV). THE PRESENT VAPOR DETECTION SYSTEM IS INCAPABLE OF DETECTING TO THE LOWERED TLV.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					2.0	27	12.5	28	7.0		55	21.5
					2.0							
					2.0	27	6.8	28	7.0		55	13.8
							.5					.5
							1.0					1.0
							1.0					1.0
							.2					.2
					2.0	27	12.5	28	7.0		55	21.5

BASIS FOR COST ESTIMATE:

NONRECURRING  
KITS  
DATA  
TRAINER  
SUPPORT EQUIP.  
TOOLING

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT  
LEAD TIME - 24 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: MISSILE PROCEDURES TRAINER COMPUTER CONTROL, MN-105188

MODELS OF MISSILES AFFECTED: LGM-25C MISSILE PROCEDURES TRAINER

DESCRIPTION/JUSTIFICATION: PROVIDES A COMPUTER AND INTERFACE FOR CONTROL AND OPERATION OF THE MISSILE PROCEDURES TRAINER TO ALLOW CONFIGURATION MAINTENANCE WITH WEAPON SYSTEM. IT IS NECESSARY TO COMPUTERIZE THIS TRAINER AS THE MAGNITUDE OF ITS TEACHING FUNCTION IS CONTINUALLY EXPANDING AS THE WEAPON SYSTEM IS MODIFIED AND MODERNIZED. CURRENT STATE-OF-THE-ART FOR EQUIPMENT TO SUPPORT AND OPERATE A TRAINER OF THIS TYPE IS DESIGNED AND BUILT FOR COMPUTER CONTROL.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
					4.7		1	5.0	3	10.3	4	20.0
NONRECURRING												
KITS					3.0		1	.5				3.5
DATA					1.0			4.0	3	9.8	4	13.8
SUPPORT EQUIP.					.7			.5		.5		2.0
TOTAL												.7
					4.7		1	5.0	3	10.3	4	20.0

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR  
LEAD TIME - 12 MONTHS



MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE  
MODIFICATION TITLE AND NU: PROPELLANT SYSTEM/IN LINE QUICK DISCONNECTS, MN-50194A  
MODELS OF MISSILES AFFECTED: LGM-25C

DESCRIPTION/JUSTIFICATION: LOGISTICS NONSUPPORTABILITY OF THE GROUND-HALF QUICK DISCONNECT AND THE SAFETY PROBLEMS RELATED WITH THE IN-LINE FILTER DICTATE THIS MODIFICATION. THE SEALS CURRENTLY USED WITH THE IN-LINE FILTER WERE A MAJOR FACTOR IN THE MISSILE ACCIDENT IN 1978 WHICH RESULTED IN TWO FATALITIES.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
			55	2.0							55	2.0
NONRECURRING					1	.2					1	.2
KITS					54	1.4					54	1.4
DATA						.2						.2
TRAINER						.2						.2
TOTAL					55	2.0					55	2.0

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT  
LEAD TIME - 11 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: SHRIKE GRAVITY BIAS, MN-10602B

MODELS OF MISSILES AFFECTED: AGM-45 A/B-9

DESCRIPTION/JUSTIFICATION:

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	200	2.2	700	6.3	600	5.5	1600	15.2	500	5.1	3600	34.3
NONRECURRING		.1										.1
KITS	200	1.9	700	6.3	600	5.5	1600	15.2	500	5.1	3600	34.0
DATA		.1										.1
SUPPORT EQUIP.		.1										.1
TOTAL	200	2.2	700	6.3	600	5.5	1600	15.2	500	5.1	3600	34.3

METHOD OF IMPLEMENTATION: INSTALLATION - DEPT/CONTRACTOR  
LEAD TIME - 12 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE  
MODIFICATION TITLE AND NO: SHRIKE FUZE ANTENNA IMPROVEMENT, MN-196098  
MODELS OF MISSILES AFFECTED: AGM-45A/B-6, -S  
DESCRIPTION/JUSTIFICATION:

SCOPE OF PROGRAM:	PRICR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
BASIS FOR COST ESTIMATE:			600	2.3			2000	7.3	1500	5.9	4100	15.5
KITS			600	1.8			2000	7.3	1500	5.9	4100	15.0
SUPPORT EQUIP.				.5								.5
TOTAL			600	2.3			2000	7.3	1500	5.9	4100	15.5

METHOD OF IMPLEMENTATION: INSTALLATION - FIELD  
LEAD TIME - 12 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: ERCS OSCILLATOR, MN-152458

MODELS OF MISSILES AFFECTED: EMERGENCY PACKET COMMUNICATION SYSTEM (ERCS)

DESCRIPTION/JUSTIFICATION: THIS MODIFICATION WILL REDESIGN THE OSCILLATOR TO CONFORM TO THE NEW INTERNATIONAL STANDARDS WHICH CHANGE THE BANDWIDTH FOR THE SYSTEM FROM 100 KHZ TO 25 KHZ. THE MOD WILL ALSO INCREASE FREQUENCY STABILITY TO ENHANCE TRANSMISSION CLARITY TO SHIP FORCES.

SCOPE OF PROGRAM:

PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
						28	2.0			28	2.0
							.6				.6
						28	1.1			28	1.1
							.3				.3
						28	2.0			28	2.0

BASIS FOR COST ESTIMATE:

NONRECURRING  
KITS  
DATA

TOTAL

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCI  
LEAD TIME - 6 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: IMPROVED EMERGENCY ROCKET COMM SYSTEM, MN-16525C

MODELS OF MISSILES AFFECTED: 494L PAYLOAD

DESCRIPTION/JUSTIFICATION: DUE TO THE AGING OF THE SYSTEM, MANY ELECTRONIC PARTS REQUIRED FOR REPAIR ARE NOT AVAILABLE AND/OR DIFFICULT AND COSTLY TO OBTAIN. MODIFICATION WILL INCORPORATE CURRENT STATE OF THE ART ELECTRONIC COMPONENTS WHICH ARE STANDARD PRODUCTION ITEMS AND AVAILABLE FROM MULTIPLE SOURCES, INTO PAYLOAD, CONTROL-MONITOR CONSOLE, CONTROL-MONITOR DATA TRANSFER AND ASSOCIATED SUPPORT EQUIPMENT.

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST
7	11.6	18	8.5	13	4.4	15	5.2	12	4.1		65	33.8
NONRECURRING	3	8.7		.7							3	9.4
KITS	4	1.2	18	5.8	13	4.4	15	5.2	12	4.1	62	20.7
DATA		1.7		.1								1.8
TRAINER				.8								.8
SUPPORT EQUIP.				1.1								1.1
TOTAL	7	11.6	18	8.5	13	4.4	15	5.2	12	4.1	65	33.8

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCI  
LEAD TIME - 12 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: SECURITY SYSTEM RETROFIT, MN-10505B

MODELS OF MISSILES AFFECTED: LGM-30F/G, WING 1 SQD 20, WING VI

DESCRIPTION/JUSTIFICATION: REPLACE THE PRESENT BEING SECURITY SYSTEM AT WINGS I AND VI WITH THE UPDATED SYLVANIA SECURITY SYSTEM USED AT WINGS II THROUGH V. THE FALSE ALARM RATES WITH THE PRESENT SYSTEM ARE EXCESSIVE, RESULTING IN AN UNSUPPORTABLE WORKLOAD AND HIGH COSTS TO SAC. THE FALSE ALARM RATES WILL BE REDUCED IN EXCESS OF 80 PERCENT BY REPLACEMENT WITH THE UPDATED SYSTEM.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING			2.0		117	13.4	217	21.3	17	1.3	351	38.0
KITS												
DATA					117	9.6	217	17.6	17	1.3	351	28.5
TRAINER						.1		.1				.2
						.6		.9				1.5
TOTAL			2.0		117	13.4	217	21.3	17	1.3	351	38.0

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT  
LEAD TIME - 24 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: NS-17 UPGRADE, MN-10520B

MODELS OF MISSILES AFFECTED: LGM-30F

DESCRIPTION/JUSTIFICATION: THE PRODUCTION OF REPLACEMENT PARTS FOR THE NS-17 GUIDANCE AND CONTROL SYSTEM WAS DEACTIVATED IN 1975. THE AIR FORCE PURCHASED 10 YEARS OF HARDNESS CRITICAL PARTS TO SUSTAIN THE SYSTEM THROUGH 1985. THE NS-17 HAS BEEN USING THESE HARDNESS CRITICAL PARTS AT AN INCREASING RATE AND SUPPORT OF THE SYSTEM IN THE FY-84-85 TIME FRAME IS QUESTIONABLE. THIS MODIFICATION WILL DECREASE HARDNESS CRITICAL PARTS REQUIREMENTS TO ASSURE CONTINUING SUPPORTABILITY OF THE MINUTEMAN II WEAPON SYSTEM.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS												
DATA												
SUPPORT EQUIP.												
TOTAL												

METHOD OF IMPLEMENTATION: INSTALLATION - DEPUT  
LEAD TIME - 12 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: BRINE CHILLER UNITS REPLACEMENT, MN-18543B

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: ENVIRONMENTAL CONTROL SYSTEM BRINE CHILLER UNIT AND INSTRUMENT AIR COMPRESSOR LIFE STUDY REVEALED THE BRINE CHILLER AND INSTRUMENT AIR COMPRESSOR HAVE OPERATED BEYOND THEIR DESIGN AND ARE NOW WORN-OUT. THE PRESENT BRINE CHILLER AND INSTRUMENT AIR COMPRESSOR WILL BE REPLACED WITH NEW DESIGNED BRINE CHILLER AND INSTRUMENT AIR COMPRESSOR. NEW BRINE CHILLERS WILL HAVE A SMALLER LOAD CAPACITY, AND WILL REQUIRE LESS ELECTRICAL ENERGY. MODIFICATION WILL BE BY WING AND ENGINEERING IS REQUIRED FOR DIFFERENT WING CONFIGURATIONS.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		T O T A L	
	QTY	COST	QTY	CCST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:	251	10.4	362	16.2	284	10.3	72	2.4			969	39.3
NONRECURRING												
KITS	251	1.7	362	1.4	284	10.0	72	2.4			969	3.1
DATA		1.5		1.2								32.2
TRAINER		.5		.5		.3						2.7
												1.3
TOTAL	251	10.4	362	16.2	284	10.3	72	2.4			969	39.3

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR/FIELD TEAM(S)  
LEAD TIME - 9 MONTHS



FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE  
 MODIFICATION TITLE AND NO: MK-12 CARBON-CARBON NOSE ASSEMBLY, MN-192048  
 MODELS OF MISSILES AFFECTED: LGM-30  
 DESCRIPTION/JUSTIFICATION: REPLACE CARBON PHENOLIC NOSE ASSEMBLY WITH CARBON-CARBON NOSE ASSEMBLY.

SCOPE OF PROGRAM.											
BASIS FOR COST ESTIMATE:											
PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
NONRECURRING											
KITS											
DATA											
		2.0								2.0	
326		326	4.5	360	5.3	240	3.7			926	13.5
		.1								.1	
326	6.6	360	5.3	240	3.7					926	15.6
TOTAL											
326	6.6	360	5.3	240	3.7					926	15.6

NONRECURRING  
KITS  
DATA

METHOD OF IMPLEMENTATION: INSTALLATION - DEPCT  
LEAD TIME - 6 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: HARCENED INTERSITE CABLE SYSTEM, MN-502128

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: HICS AND ITS ASSOCIATED SUBSYSTEMS HAVE DEGRADED TO A POINT THAT  
PIECEMEAL CORRECTIVE ACTIONS CANNOT SUSTAIN THE SYSTEM. MODIFICATION WILL INCLUDE REDESIGN OF  
PRESSURE CIRCUITS, INSTALLATION OF ABOVE GROUND PRESSURE CONTACTORS, INSTALLATION OF POLE  
MOUNTED COMPRESSORS AND A MODIFIED FAULT ALARM SYSTEM.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
					1139	5.1	792	5.6	1059	4.2	2990	14.9
BASIS FOR COST ESTIMATE:												
NONRECURRING					2	.5					2	.5
KITS					1137	4.5	792	5.5	1059	4.2	2988	14.2
DATA						.1						.1
SUPPORT EQUIP.								.1				.1
TOTAL					1139	5.1	792	5.6	1059	4.2	2990	14.9

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 12 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: SYLVANIA SECURITY SYSTEM, MN-561498

MODELS OF MISSILES AFFECTED: LGM-30 F/G, WINGS II-V

DESCRIPTION/JUSTIFICATION: MODIFICATION WILL CONSIST OF CHANGING THE OUTER ZONE ALARM CONTROL DRAWER LOGIC CIRCUITRY TO DISCRIMINATE AGAINST NUISANCE ALARMS CAUSED BY ANIMALS, BIRDS, WEEDS, RAIN AND SNOW, AND TO ALARM ONLY ON HUMAN INTRUDERS. TESTS OF A NEW DESIGN PROCESSOR HAVE DEMONSTRATED A REDUCTION OF NUISANCE ALARMS OF 80 PERCENT CAN BE ACHIEVED.

SCOPE OF PROGRAM:

	FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	CCST	QTY	CCST	QTY	COST	QTY	COST
11	1.1	2.6	200	3.8	450	3.8			661	11.3
NONRECURRING	11	.8	2.6	1.6		.8			11	5.8
KITS			200	1.4	450	3.0			650	4.4
DATA		.3		.8						1.1
TOTAL	11	1.1	2.6	3.8	450	3.8			661	11.3

BASIS FOR COST ESTIMATE:

METHOD OF IMPLEMENTATION: INSTALLATION - FIELD  
LEAD TIME - 12 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NC: UPGRADE TRAINERS, MN-58161B

MODELS OF MISSILES AFFECTED: LGM-30 MISSILE TRAINERS

DESCRIPTION/JUSTIFICATION: CAPACITY TO UPDATE THE BUFFER AND INTERFACE FOR LGM-30 TRAINERS IS EXHAUSTED. THE TRAINERS MUST BE MAINTAINED IN CURRENT CONFIGURATION OF THE WEAPON SYSTEM FOR CREW TRAINING TO PRECLUDE INCORRECT AND/OR UNSAFE CONDITIONS DUE TO IMPROPER TRAINING. THIS MOD PROVIDES AN EXPANDED BUFFER TO ALLOW FOR TRAINER CONFIGURATION MAINTENANCE.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	CCST	QTY	COST
			23	2.5							23	2.5
					2	.5					2	.5
					21	1.5					21	1.5
						.5						.5
TOTAL			23	2.5							23	2.5

BASIS FOR COST ESTIMATE:

NONRECURRING  
KITS  
DATA

METHOD OF IMPLEMENTATION: INSTALLATION - CONTRACTOR  
LEAD TIME - 18 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: WING VI GUIDANCE COOLING UNIT, MN-592718

MODELS OF MISSILES AFFECTED: LGM-30

DESCRIPTION/JUSTIFICATION: THIS PROGRAM WILL MODIFY THE EXISTING GUIDANCE AND CONTROL COOLER AMPLIFIERS TO INSURE PROPER OPERATION OF THE MISSILE GUIDANCE SET COOLING SYSTEM FLOW CONTROL VALVE. STRATEGIC AIR COMMAND (SAC) HAS BEEN EXPERIENCING EXCESSIVE SITE DEGRADES BECAUSE OF THIS AMPLIFIER PROBLEM.

SCOPE OF PROGRAM:

	PRIOR		FY-81		FY-82		FY-83		OUTYEAR		TOTAL	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
BASIS FOR COST ESTIMATE:												
NONRECURRING												
KITS												
DATA												
SUPPORT EQUIP.												
TOTAL												

METHOD OF IMPLEMENTATION: INSTALLATION - DEPOT  
LEAD TIME - 18 MONTHS

MODIFICATION OF MISSILES  
FY-82 PROGRAM

FY-82 APPROPRIATION: MISSILE PROCUREMENT, AIR FORCE

MODIFICATION TITLE AND NO: AIR 7 UPDATE

MODEL OF MISSILES AFFECTED: AIM-7E

DESCRIPTION/JUSTIFICATION:

SCOPE OF PROGRAM:

BASIS FOR COST ESTIMATE:

PRIOR QTY	COST	FY-81		FY-82		FY-83		OUTYEAR		TOTAL QTY	COST
		QTY	COST	QTY	COST	QTY	COST	QTY	COST		
110	5.0	475	7.2	900	14.1	1350	19.9	1537	25.9	4372	72.1
110	1.4	475	7.2	900	12.1	1350	19.9	1537	25.9	4372	56.7
	.3										.3
	1.7				2.2						3.7
110	5.0	475	7.2	900	14.1	1350	19.9	1537	25.9	4372	72.1

NEED FOR THE  
KITS  
SUPPORT EQUIP.  
TOOLING

TOTAL

METHOD OF TOOL ACQUISITION: INSTALLATION - CONTRACTOR  
LEAD TIME - 12 MONTHS

	PRIOR	FY-81	FY-82	FY-83	OUTYEAR	TOTAL
	QTY CCST	QTY CCST	QTY CCST	QTY COST	QTY COST	QTY COST
BASIS FOR COST ESTIMATE:	---	---	---	9.1	23.3	32.4
KITS	---	---	---	9.1	23.3	32.4
TOTAL	---	---	---	9.1	23.3	32.4

1 COMPONENT Air Force		FY 1982 PROCUREMENT PROJECT DATA		2 DATE 15 Sep 80	
3 INSTALLATION AND LOCATION Hughes Aircraft AF Plant #44 Tucson AZ			4 PROJECT TITLE Expansion		
5 PROGRAM ELEMENT 78011F	6 CATEGORY CODE 222-222	7 PROJECT NUMBER	8 PROJECT COST (\$1000) \$48.7		
9 COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
2. Provide supplemental cooling for heat treat area, Bldg 801					\$48.7
228					
10 DESCRIPTION OF PROPOSED CONSTRUCTION					
2. Install two 12,500 CFM evaporative coolers on the roof to supply additional cooling. Install pneumatic pressure controls on existing exhaust fans.					



1. COMPONENT		FY 19		2. DATE		3. DATE	
4. PROJECT TITLE		5. PROJECT NUMBER		6. PROJECT COST (\$000)		7. PROJECT COST (\$000)	
AF Plant # 44 Hughes Aircraft Tucson, AZ		222-222		222-222		222-222	
8. PROGRAM ELEMENT		9. CATEGORY CODE		10. PROJECT NUMBER		11. PROJECT COST (\$000)	
280114		222-222		222-222		222-222	
12. DESCRIPTION OF PROPOSED CONSTRUCTION		13. ITEM		14. U/M		15. QUANTITY	
229		FY 82-Phase I (Architectural and Engineering Work)					
Provide Plating Shop Building 814 and rehabilitate existing area in Building 801.		FY 83 - Phase II (Construction)					
Design and construct a 24,000 sq ft bldg to house the plating shop operation. This new building will be used to plate, deburr and heat-treat all fabricated parts. The area in Building 801 which currently houses the plating operation will be rehabilitated.							
16. UNIT COST		17. UNIT COST		18. UNIT COST		19. UNIT COST	
\$ 580.0		\$ 580.0		\$ 580.0		\$ 580.0	
\$4,049.2		\$4,049.2		\$4,049.2		\$4,049.2	

OTHER PROCUREMENT, AIR FORCE

For procurement and modification of equipment (including ground guidance and electronic control equipment, and ground electronic and communication equipment), and supplies, materials, and spare parts therefor, not otherwise provided for; the purchase of not to exceed nine hundred and sixty-one passenger motor vehicles for replacement only, and expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land without regard to Section 9774 of Title 10, United States Code, for the foregoing purposes, and such lands and interests therein may be acquired, and construction prosecuted thereon prior to the approval of Title as required by Section 355, Revised Statutes, as amended: reserve plant and Government and contractor-owned equipment layaway \$4,013,200,000, to remain available for obligation until September 30, 1984 (5 U.S.C. 3109; 10 U.S.C. 2110, 2353, 2386, 8012, 9505, 9531-32, 31 U.S.C. 638a, 638c, 649c, 718, 50 U.S.C. 491-94 Department of Defense Appropriation Act 1981)

AF

## Other Procurement, Air Force

15 JAN 61

Program and Financing (in thousands of dollars)						
Identification code	57-3080-0-1-051	Budget plan (amounts for procurement actions programmed)			Obligations	
		1960 actual	1961 est.	1962 est.	1960 actual	1961 est.
		1962 est.	1962 est.	1962 est.	1962 est.	1962 est.
Program by activities						
Direct:						
1.	Munitions and associated equipment	321,480	283,245	460,500	323,611	208,970
2.	Vehicular equipment	166,181	162,002	260,100	166,184	153,408
3.	Electronics and telecommunications equipment	602,448	694,466	912,800	509,602	692,851
4.	Other base maintenance and support equipment	1,564,662	1,859,659	2,379,800	1,528,833	1,637,496
	Total direct	2,854,761	2,999,372	4,013,200	2,628,040	3,680,607
	Reimbursable program (total)	239,696	193,774	174,074	178,140	192,435
	Total	2,894,446	3,193,146	4,187,274	2,706,180	2,885,060
10.00						3,873,107
Financing:						
Offsetting collections from:						
11.00	Federal funds	-156,998	-179,700	-160,000	-154,111	-179,700
13.00	Trust funds	-24,629	-9,074	-9,074	-22,461	-9,074
14.00	Non-federal sources	-56,076	-6,000	-6,000	-55,179	-6,000
17.00	Recovery of prior year obligations, obi plan				-20,612	
	Unobligated balance available, start of year:					
21.40	For completion of prior year budget plans					
21.40	Available to finance new budget plans	-10,600				
22.40	Reprogramming from or to prior year budget plan	-114,246				
23.40	Unobligated balance transferred to other accounts	94,900			54,900	
24.40	Unobligated balance available, end of year				675,199	963,286
26.00	Unobligated balance lapsing	66,146			68,146	
	Budget authority	2,852,941	2,999,372	4,013,200	2,852,941	2,999,372
39.00						4,013,200
Budget authority:						
40.00	Appropriation	2,834,031	2,999,372	4,013,200	2,834,031	2,999,372
	Appropriation rescinded	-1,800			-1,800	
41.00	Transferred to other accounts	-60,890			-60,890	
	Transferred from other accounts	51,900			51,900	
42.00						
43.00	Appropriation (adjusted)	2,823,241	2,999,372	4,013,200	2,823,241	2,999,372
50.00	Reappropriation	29,700			29,700	
						4,013,200
Relation of obligations to outlays:						
71.00	Obligations incurred, net	2,474,429	2,691,266		2,474,429	3,699,033
72.40	Obligated balance, start of year	1,642,773	1,625,663		1,642,773	1,642,349
74.40	Obligated balance, end of year	-1,625,663	-1,542,349		-1,625,663	-2,029,162
77.00	Adjustments in expired accounts	-26,234			-26,234	
78.00	Adjustments in unexpired accounts	-20,612			-20,612	
90.00	Outlays	2,444,692	2,774,600		2,444,692	3,212,200

AF Other Procurement, Air Force 15 JAN 61

Object Classification (in thousands of dollars)

Identification code	87-3080-0-1-051	1980 actual	1981 est.	1982 est.
31.0	Direct obligations:			
	Equipment	2,525,040	2,592,625	3,680,507
99.0	Total direct obligations	2,525,040	2,592,625	3,680,507
31.0	Reimbursable obligations:			
	Equipment	175,140	192,435	192,500
99.9	Total obligations	2,700,180	2,885,060	3,873,107

AF Other Procurement, Air Force 15 JAN 61

Identification code	57-3060-0-1-051	Program and Financing (in thousands of dollars)		1978 Fiscal Year program		
		Budget plan (amounts for procurement actions programmed)		Obligations		
		1980 actual	1981 est.	1982 est.	1980 actual	1981 est.
Program by activities:						
Direct:						
	1. Munitions and associated equipment				8,822	
	2. Vehicular equipment				10,711	
	3. Electronics and telecommunications equipment				77,091	
	4. Other base maintenance and support equipment				16,871	
	Total direct				113,495	
	Reimbursable program (total)				5,196	
10.00	Total				120,391	
Financing:						
Offsetting collections from:						
11.00	Adjustment to py federal fund orders				619	
12.00	Adjustment to py trust fund orders				-7,349	
14.00	Adjustment to non-federal sources				2,985	
17.00	Recovery of prior year obligations, obl' plan				-17,496	
	Unobligated balance available, start of year:					
21.40	For completion of prior year budget plans				-193,366	
23.40	Reprogramming from or to prior year budget plan					
	Unobligated balance transferred to other accounts					
25.00	Unobligated balance lapsing	34,900			34,900	
40.00	Budget authority	57,545			57,545	
		-1,800			-1,800	

AF		Other Procurement, Air Force		15 JAN 81	
		Program and Financing (in thousands of dollars)		1979 Fiscal year program	
Identification code		87-3080-0-1-081		Obligations	
		Budget plan (amounts for procurement actions programmed)			
		1980 actual 1981 est. 1982 est.		1980 actual 1981 est. 1982 est.	
Program by activities:					
Direct:					
1. Munitions and associated equipment					
2. Vehicular equipment					
3. Electronics and telecommunications equipment					
4. Other base maintenance and support equipment					
Total direct					
Reimbursable program (total)					
Total					
10.00				30,431	11,408
				30,081	20,538
				116,324	77,111
				32,873	6,735
				809,819	115,790
				31,107	10,100
				240,826	125,890
Financing:					
Offsetting collections from:					
11.00				2,268	
13.00				9,817	
14.00				-56	
17.00				-3,080	
21.40				-395,154	-125,890
21.40				-10,800	
21.40					
23.40					
				20,000	
24.40				125,890	
26.00				10,800	
40.00					
Budget authority					

AF		Other Procurement, Air Force		10 JAN 81	
		Program and Financing (in thousands of dollars)		1980 Fiscal Year Program	
Identification code		57-3080-0-1-051		Obligations	
		Budget plan (amounts for procurement actions programmed)			
		1980 actual	1981 est.	1980 actual	1981 est.
		1982 est.	1982 est.	1982 est.	1982 est.
Program by activities:					
Direct:					
1. Munitions and associated equipment					
2. Vehicular equipment					
3. Electronics and telecommunications equipment					
4. Other base maintenance and support equipment					
Total direct		321,480		284,358	17,886
Reimbursable program (total)		166,181		125,392	15,345
Total		802,448		316,187	193,287
Total direct		1,564,652		1,477,369	82,167
Reimbursable program (total)		2,803,751		2,803,326	288,686
Total		2,894,446		141,837	49,840
Total		2,894,446		2,945,163	338,526
Total					210,757
Financing:					
Offsetting collections from:					
Federal funds					
Trust funds					
Non-federal sources					
Recovery of prior year obligations, obi plan					
Unobligated balance available, start of year					
Unobligated balance available, end of year					
Budget authority		2,854,741		549,309	210,783
Budget authority		2,854,741		2,854,741	210,783
Budget authority:					
Appropriation					
Transferred to other accounts					
Transferred from other accounts					
Appropriation (adjusted)					
Reappropriation					

AF		Other Procurement, Air Force		16 JAN 81	
		Program and Financing (in thousands of dollars)		1981 Fiscal year program	
Identification code		Budget plan (amounts for procurement actions programmed)		Obligations	
		1980 actual	1981 est.	1982 est.	1980 actual 1981 est. 1982 est.
Program by activities:					
Direct:					
10.00	1. Munitions and associated equipment		283,245		179,578 98,471
	2. Vehicular equipment		182,002		117,524 37,280
	3. Electronics and telecommunications equipment		894,466		422,453 186,382
	4. Other base maintenance and support equipment		1,859,859		1,566,594 169,428
	Total direct		2,999,372		2,265,149 471,541
	Reimbursable program (total)		193,774		132,495 26,280
	Total		3,193,146		2,420,644 497,821
Financing:					
Offsetting collections from:					
11.00	Federal funds		-179,700		-179,700
13.00	Trust funds		-9,074		-9,074
14.00	Non-federal sources		-8,000		-8,000
21.40	Unobligated balance available, start of year				-772,502
24.40	Unobligated balance available, end of year				274,981
40.00	Budget authority		2,999,372		2,999,372



AF Other Procurement, Air Force 15 JAN 81

Program and Financing (in thousands of dollars) 1982 Fiscal year program

Identification code	57-3080-0-1-051	Budget plan (amounts for procurement actions programmed)		1982 Fiscal year program	
		1980 actual	1981 est	1982 est	1982 est
Program by activities:					
Direct:					
1.	Munitions and associated equipment			460,500	313,671
2.	Vehicle equipment			260,100	147,980
3.	Electronics and telecommunications equipment			912,800	846,771
4.	Other base maintenance and support equipment			2,379,800	2,037,905
Total direct				4,013,200	3,046,327
Reimbursable program (total)				174,074	118,202
Total				4,187,274	3,164,529
10.00					
Financing:					
Offsetting collections from:					
11.00	Federal funds			-160,000	-160,000
13.00	Trust funds			-9,074	-9,074
14.00	Non-federal sources			-5,000	-5,000
24.40	Unobligated balance available, end of year				1,022,745
40.00	Budget authority			4,013,200	4,013,200

18 JAN 61

Program and Financing (In thousands of dollars)

0012061190

Budget plan (amounts for procurement actions programmed)

	1980 actual	1981 est	1982 est	1980 actual	1981 est	1982 est
1980 actual						
1981 est						
1982 est						
1980 actual						
1981 est						
1982 est						

**Program by activities:**

**Direct:**

## 1. Munitions and associated equipment

4. Other base maintenance and support equipment

**Equipment**

10 00	Total
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4,000

920

### Financing:

	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893	1892	1891	1890	1889	1888	1887	1886	1885	1884	1883	1882	1881	1880	1879	1878	1877	1876	1875	1874	1873	1872	1871	1870	1869	1868	1867	1866	1865	1864	1863	1862	1861	1860	1859	1858	1857	1856	1855	1854	1853	1852	1851	1850	1849	1848	1847	1846	1845	1844	1843	1842	1841	1840	1839	1838	1837	1836	1835	1834	1833	1832	1831	1830	1829	1828	1827	1826	1825	1824	1823	1822	1821	1820	1819	1818	1817	1816	1815	1814	1813	1812	1811	1810	1809	1808	1807	1806	1805	1804	1803	1802	1801	1800	1799	1798	1797	1796	1795	1794	1793	1792	1791	1790	1789	1788	1787	1786	1785	1784	1783	1782	1781	1780	1779	1778	1777	1776	1775	1774	1773	1772	1771	1770	1769	1768	1767	1766	1765	1764	1763	1762	1761	1760	1759	1758	1757	1756	1755	1754	1753	1752	1751	1750	1749	1748	1747	1746	1745	1744	1743	1742	1741	1740	1739	1738	1737	1736	1735	1734	1733	1732	1731	1730	1729	1728	1727	1726	1725	1724	1723	1722	1721	1720	1719	1718	1717	1716	1715	1714	1713	1712	1711	1710	1709	1708	1707	1706	1705	1704	1703	1702	1701	1700	1699	1698	1697	1696	1695	1694	1693	1692	1691	1690	1689	1688	1687	1686	1685	1684	1683	1682	1681	1680	1679	1678	1677	1676	1675	1674	1673	1672	1671	1670	1669	1668	1667	1666	1665	1664	1663	1662	1661	1660	1659	1658	1657	1656	1655	1654	1653	1652	1651	1650	1649	1648	1647	1646	1645	1644	1643	1642	1641	1640	1639	1638	1637	1636	1635	1634	1633	1632	1631	1630	1629	1628	1627	1626	1625	1624	1623	1622	1621	1620	1619	1618	1617	1616	1615	1614	1613	1612	1611	1610	1609	1608	1607
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21.70	Unobligated balance available, end of year
24.40	Unobligated balance available, end of year

**THE UNIVERSITY OF CHICAGO**

Budget authority (appropriation)
40.00

4,000

Relation of obligations to outlays.

71.00 Obligations incurred, not  
 retention of obligations to

Obligated balance, start of year	72.40
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72.40	Outstanding balance;
74.40	Obligated balance, end of year

74.40 Obligated to

160

80.00 Due 10/05

400

900

# UNCLASSIFIED

## DEFENSE PROGRAMS, AIR FORCE

(in thousands of dollars)

	FY 1982	FY 1983	Difference
Programs	2,400,000	2,400,000	0
Equipment	1,000,000	1,000,000	0
Support	1,000,000	1,000,000	0
Other	1,000,000	1,000,000	0
Total	5,400,000	5,400,000	0

The total program cost for FY 1982 is \$5.4 billion. This includes \$2.4 billion for programs, \$1.0 billion for equipment, \$1.0 billion for support, and \$1.0 billion for other. The total program cost for FY 1983 is also \$5.4 billion. This includes \$2.4 billion for programs, \$1.0 billion for equipment, \$1.0 billion for support, and \$1.0 billion for other. The difference between the FY 1982 and FY 1983 program costs is \$0.0 billion.

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Other Base Maintenance and Support Equipment - \$516.1 of which \$26.8 million is for new requirements not now included in the FY 1981 program, a net increase of \$15.6 million in on-going programs, and an increase of \$311.3 million for Selected Activities, and an increase of \$164.4 million for Special programs.

New obligational authority equal to the amount of the direct budget plan is required to finance the planned FY 1982 program.

#### FY 1982 HIGHLIGHTS

Program requirements for Munitions and Associated Equipment are \$460.5 million, an increase of \$177.3 million over FY 1981 due to increases in ongoing requirements such as: BSU-49 and BSU-50 Retarders, Rockeye, Laser Bomb Guidance Kits, BDU-35 Atomic Bombs, and the GBU-15.

Program requirements for Vehicular Equipment are \$260.1 million, an increase of \$98.1 million over the program for FY 1981. The FY 1982 program will provide four Rapid Runway Repair Sets for use in Europe, continue the program to modernize Red Horse squadrons, procure armored vehicles for nuclear security forces, and improve NATO interoperability by procuring European non-tactical vehicles for use in Europe. The program also provides a slight reduction of the backlog of overaged vehicles, including passenger carrying.

Program requirements for Electronics and Telecommunications Equipment are \$912.8 million, an increase of \$218.3 million over the FY 1980 program. The FY 1981 program continues the Communications Security Program, the Defense Support Program, Joint Tactical Communication Program, HF Radio Consolidation Program, and SPACETRACK. It begins the SACDIN program, Minimally Attended Radar program and JTIDS program.

Program requirements for Other Base Maintenance and Support Equipment are \$1,863.7 million, an increase of \$516.1 million over the FY 1981 program. Selected Activities realized an increase of \$311.3 million, and Special Programs increased by \$164.4 million. New items in FY 1982 account for \$26.8 million for procurement of wattmeters, 60KW, 100KW and 200KW generators, RDF mobility equipment and photo processing/interpretation system.

The individual budget activity justifications elaborate on the FY 1982 program requirements and provide additional detail on the above outlined increases.

# SUMMARY OF REQUIREMENTS

	(In Thousands of Dollars)		
	FY 1980 Actual	FY 1981 Actual	FY 1982 Estimate
Munitions and Associated Equipment.....	\$ 321,460	\$ 283,245	\$ 460,500
Vehicular Equipment.....	166,181	162,002	260,100
Electronics and Telecommunication Equipment.....	602,448	694,466	912,800
Other Base Maintenance and Support Equipment.....	1,564,662	1,863,659	2,379,800
TOTAL DIRECT PROGRAM	654,751	3,003,372	4,013,200
Reimbursable Program.....	239,695	193,774	174,074
TOTAL PROGRAM REQUIREMENTS (CURRENT)	2,894,446	3,197,146	4,187,274
Less: Portion of program to be obligated in subsequent fiscal years.....	549,309	742,502	1,022,771
Plus: Obligations incurred against prior year program funds.....	361,017	434,416	708,604
TOTAL OBLIGATIONS.....	2,706,154	2,889,060	3,873,107

(In Thousands of Dollars)

Direct Program Requirements - FY 1982	- \$460,500
Direct Program Requirements - FY 1981	- \$283,245
Direct Program Requirements - FY 1980	- \$321,460

ACTIVITY: Munitions and Associated Equipment

PART I - PURPOSE AND SCOPE

Provides munitions for Tactical and Strategic Forces including: munitions and associated equipment, armament training devices, spares and repair parts, and equipment modifications. This materiel is required for: (1) the training of aircrews in weapon employment, (2) maintaining pilot-crew combat proficiency; (3) training weapons personnel in maintenance, storage, movement, assembly, and loading of munitions; and (4) the procurement of War Reserve Materiel (WRM) to meet specified inventory objectives.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1982 Program includes funds for the procurement of Small Arms Ammunition, 20MM Training Cartridges, 30MM Training/High Explosive Incendiary/Armor Piercing Incendiary Cartridges; Practice Bombs (BDU-33, MK-82), Guided Bombs, Flares and Fuzes. These funds provide for procurement of training, base defense, and WRM Munitions and associated equipment.

The following table summarizes the program requirements for each of the major categories of munitions and associated equipment in the past, current, and budget year programs.

# DIRECT PROGRAM REQUIREMENTS

		(In Thousands of Dollars)	
		1980	1982
1. Rockets and Launchers	\$ 4,762	\$ 407	\$ 114
2. Cartridges	193,019	135,900	182,474
3. Bombs	90,948	87,340	208,743
4. Targets	3,216	6,904	8,540
5. Other Items	13,525	38,598	42,801
6. Fuzes	15,990	14,096	17,828
Total Direct Program Requirements	\$321,460	\$283,245	\$460,500

Major procurements planned in FY 1982 include:

Rockets and Launchers - Provides for procurement of practice rockets and miscellaneous rocket components to support training requirements.

Cartridges - Provides for continued procurement of 20MM training cartridges used in tactical aircraft guns, 30MM Training/High Explosive Incendiary (HEI), Armor Piercing Incendiary (API) Cartridges used in the A-10 aircraft and MXU-4A/A Engine Starters.

Bombs - The FY 1982 program provides for procurement of Laser Bomb Guidance Kits and several practice bombs as well as increased procurement of the BSU-49 and BSU-50 Air Inflatable Retarders, and procurement of the CBU-15.

Targets - Provides for procurement of aerial tow targets for air-to-air gunnery training.

Other Items - Provides for procurement of a variety of flares, Spares and Repair Parts, and Modification.

Fuzes - Provides for procurement of the FMU-112 impact or short delay fuze for retarded bombs, and the MK-339 Mechanical Time Fuze for cluster munitions.



(in Thousands of Dollars)

Direct Program Requirement - FY 1982	- \$260,100
Direct Program Requirement - FY 1981	- \$162,002
Direct Program Requirement - FY 1980	- \$166,161

ACTIVITY: Vehicular Equipment

PART I - PURPOSE AND SCOPE

Provide for all classes and types of direct mission related vehicles to support operational readiness of the active and reserve forces, including the capability to sustain a wartime surge of forces for the length of the conflict. Examples of vehicle types are material handling equipment, refuelers, aircraft launch and recovery vehicles, and fire fighting equipment.

PART II - JUSTIFICATION OF FUNDS REQUESTED

Provides for the procurement of critical materiel handling equipment, the replacement of wornout support vehicles, improvement of aircraft launch and recovery support, and replacement of overage and uneconomical vehicles in order to improve combat readiness.

The following table summarizes the program requirement for each of the major categories of equipment in the past, current and budget year programs.

DIRECT PROGRAM REQUIREMENTS		(In Thousands of Dollars)	
		1980	1981
1. Passenger Carrying Vehicles	\$	5,642	6,759
2. Cargo and Utility Vehicles		40,253	62,170
3. Special Purpose Vehicles		43,956	39,457
4. Firefighting Equipment		3,884	4,507
5. Materials Handling Equipment		45,359	22,244
6. Base Maintenance Support		27,087	26,865
Total Direct Program Requirements		\$166,181	\$162,002
Major procurement planned in FY 1982 include:			\$260,100

Passenger Carrying Vehicles - Provides for replacement of unreliable ambulances and buses which are wornout and require excessive costs to repair and maintain. The FY 1982 program is \$13.0 million more than FY 1981, however, this category represents less than 10% of the entire vehicle program, both in cost and number of vehicles. With few exceptions, such as the European Vehicle Buy Program and urgently needed ambulances, passenger vehicle replacement has been deferred for the past two years in favor of higher priority requirements. Hence, even though the FY 82 request is \$13.0M greater than FY 81, it does not represent a "get well" budget, but rather, partial replacement and funding of critical shortages.

Cargo and Utility Vehicles - This category consists of key support vehicles required to transport air crews, distribute cargo and munitions, tow communications equipment, and expedite delivery of aircraft spare parts to the flightline. \$16.1M, more than one half of the \$29.3M increase in this category, is attributable to M-55 and M-813 cargo trucks and high mobility vehicles; reflecting an increased emphasis on tactical and readiness operations at forward and deployed locations. \$29.4M of the FY 82 budget is for light cargo trucks to replace large, wornout equipment with new, fuel efficient units, achieving the dual benefits of increased reliability and reduced fuel consumption.

Special Purpose Vehicles - The FY 1982 request is \$38.4 million more than FY 1981 primarily because of increased aircraft refueling truck procurement, on a multiyear contract which began in FY 81. In addition to aircraft refuelers, this category provides for aircraft tow tractors, flightline equipment tow tractors, telephone construction and maintenance vehicles, water and oil tank trucks, and DEW line support vehicles. Reliability of special purpose vehicles has a direct impact on the readiness of air force units worldwide.

Firefighting Equipment - Provides equipment required for aircraft crash and rescue operations and for structural fire protection of base property. The FY 1982 request is \$2.1 million more than FY 1981 primarily because of procurement of the P-8 fire truck, which was not procurable in recent years. More than one half of the funds in this category (\$3.6M) are for the third year of a three year multiyear contract for fire extinguishers.

Materials Handling Equipment - Provides for procurement of 463L system forklifts and cargo loaders to support aerial port and munitions handling/loading operations. Rapid onload/offload of strategic and tactical airlift war materiel is imperative, therefore, adequate and reliable aircraft loaders and forklifts are a necessity. Current assets are a weak link in our ability to project a military force into a tactical theater. The FY 1982 budget is \$9.4M greater than FY 1981, with the \$3.9M increase for 10,000 pound forklifts representing the largest increase.

Base Maintenance Support Equipment - Provides funding for construction and maintenance equipment required for airfield and grounds maintenance. This category also includes equipment required for Rapid Runway Repair (RRR) units. The FY 1982 program is \$5.6 million more than FY 1981 primarily due to procurement of RRR excavators (\$1.9M) and a \$2.0M increase in vehicle modification funds, which will permit replacement of obsolete components on 25,000 pound aircraft loaders with current state-of-the-art components. The modification program provides like-new vehicles while avoiding a very expensive replacement procurement program.

(In Thousand of Dollars)

Direct Program Requirements - FY 1982 -	\$912,800
Direct Program Requirements - FY 1981 -	\$694,466
Direct Program Requirements - FY 1980 -	\$602,448

ACTIVITY: Electronics and Telecommunications Equipment

PART I - PURPOSE AND SCOPE

Provides ground electronic and telecommunications systems for command and control of the operational forces, the detection of hostile forces, and Air Force-wide communications.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The funds requested will ensure the continued worldwide command and control of our strategic and tactical forces through procurement of prime mission electronics and telecommunications equipment, modification kits, peculiar test equipment, and essential spare and repair parts. Provision is also made for the supporting structure requirements, such as enroute and terminal navigational and landing guidance, intelligence, and security of Air Force activities, facilities and personnel. Also included are items such as communications and navigation radio equipment, landline communications equipment, detection and surveillance radars, communications security devices, data processing and display equipment, meteorological equipment, peculiar test equipment used in the operation and maintenance of these systems, and the spares, repair parts, components, and modification kits needed for assurance of effective and continued operation.

The following table summarizes the program requirements for each of the major categories of equipment in the past, current and budget year programs:

# DIRECT PROGRAM REQUIREMENTS

	(In Thousands of Dollars)		
	<u>1980</u>	<u>1981</u>	<u>1982</u>
1. Communications Security Equipment	\$ 39,236	\$ 37,469	\$ 74,484
2. Intelligence Programs	13,970	17,595	18,046
3. Electronics Programs	89,556	157,370	263,995
4. Special Comm-Electronics Projects	208,774	147,134	173,590
5. Air Force Communications	41,243	116,354	165,226
6. DCA Programs	28,642	26,144	15,060
7. Organization and Base	149,816	116,518	167,083
8. Modifications	<u>31,211</u>	<u>75,882</u>	<u>35,316</u>
Total Direct Program Requirements	\$602,448	\$694,466	\$912,800

## Major procurements planned in FY 1982 included:

Communications Security Equipment - \$74.5 million is requested for Communications Security Equipment. This program is for the procurement and installation of devices for encryption and decryption of communications, to ensure security of voice, teletype and data communications. Included is equipment to secure data networks and tactical radios. The FY 1982 request is approximately \$37 million more than the FY 1981 program because of increased FY 82 requirements to secure new space systems and 1K1-TAC equipment entering the inventory.

Intelligence Programs - This program provides the equipment for worldwide USAF collection, processing, and reporting of intelligence information.

Electronics Programs - This program includes electronic equipment to augment existing systems and to replace obsolete equipment. Included is equipment for Tactical Air Control Systems, the Defense Support Program, and tracking of space objects. The FY 1982 program increases by approximately \$107 million because of planned procurement for the Defense Support Program, SACDIN, GEODSS, and the Minimally Attended Radar Program.

Special Comm-Electronics Programs - This program procures electronic equipment to satisfy specific mission requirements. Included are Automatic Data Processing Equipment, Air Base Defense Systems, and equipment for operational range improvements. The FY 1982 program increase of approximately \$26 million over FY 1981 is attributable to procurements for the HF Radio Consolidation Program and the Joint Tactical Information Distribution System (JTIDS).

Air Force Communications - These programs are the primary Air Force Communications terminal equipments used to provide common user facilities. Included are Air Force satellite communications terminals, equipment used in communications centers, and interoperable tactical ground equipment. The FY 1982 program increase of approximately \$49 million over FY 1981 is due to increased procurement for the Joint Tactical Communications Program (TRI-TAC).

DCA Programs - These programs are in support of the Defense Communications System. Included is the Wideband Systems Upgrade Program. The FY 1982 program decrease of approximately \$11 million from the FY 1981 program is due to reduced procurements in the Wideband Systems Upgrade Program, no procurements for DCS Secure Voice, and termination of the Automated Technical Control Program.

Organization and Base - Included in this program is electronic equipment for individual Air Force units and bases. It includes training equipment, mobility radios, and spares and repair parts. The FY 1982 program increase of approximately \$51 million is due to increased procurements for Training Support Equipment, Tactical C-E Equipment, Radio Equipment and new procurement of Radar Scopes.

Modifications - This program is for the modification of existing electronic equipment to increase reliability, provide a new or increased capability, or correct an operational deficiency. The FY 1982 program decreases by approximately \$41 million primarily because of reduced modifications to the Ballistic Missile Early Warning System.

(In Thousands of Dollars)

Direct Program Requirements - FY 1982	- \$2,379,800
Direct Program Requirements - FY 1981	- \$1,863,659
Direct Program Requirements - FY 1980	- \$1,564,662

ACTIVITY: Other Base Maintenance and Support Equipment

PART I - PURPOSE AND SCOPE

Provide ground support equipment, not otherwise provided with the major weapons systems, for operational forces and supporting structure. Included are test equipment, personal safety and rescue equipment, medical and dental equipment, and automated materials handling equipment for improving the efficiency of the Air Force supply and maintenance system, base maintenance equipment, electrical equipment, intelligence and reconnaissance equipment, spaces and modifications all for the day to day support of the forces in being and minimum quality of life for Air Force personnel.

PART II - JUSTIFICATION OF FUNDS REQUESTED

The funds requested provide for (1) test equipment for maintenance, calibration, repair and checkout of weapon systems, electronics equipment and communications apparatus; (2) personnel safety items to safeguard the lives of aircrews and other personnel; (3) equipment for repair and overhaul at maintenance shops, mechanization of materials handling systems at Air Force bases depots and passenger and cargo terminals; (4) electric power equipment and area lighting; (5) base support equipment, base level procurement of equipment with a unit cost of \$3,000 or more for medical, food service, repair, and administrative activities; (6) special support projects including national foreign intelligence programs, Air Force elements of the atomic energy surveillance program and industrial preparedness products to support production of equipment funded in this appropriation; and (7) modification kits required to assure effective and continuous operation of equipment. Requirements are computed considering world-wide authorizations and available assets, including reparables and those on order.

The following table summarizes the program requirements for each of the major categories of equipment in the past, current and budget year program.

DIRECT PROGRAM REQUIREMENTS

	(In Thousands of Dollars)		
	1980	1981	1982
1. Test Equipment	\$ 31,061	\$ 35,716	\$ 37,242
2. Personal Safety and Rescue Equipment	8,033	25,696	31,432
3. Depot Plant and Materials Handling Equipment	24,366	34,275	39,835
4. Electrical Equipment	3,096	7,447	12,782
5. Base Support Equipment	99,351	111,858	123,913
6. Special Support	1,398,753	1,548,667	2,134,595
Total Direct Program Requirements	\$1,564,662	\$1,865,659	\$2,379,800

Major procurements planned in FY 1982 include:

Test Equipment - Provides calibration standards Precision Measurement Equipment Laboratories and the Air Force Meteorology Center; oscilloscopes. Signal generators electronic counters, noise level and display meters, and other test equipment costing less than \$900,000 each. The FY 1982 program is slightly more than FY 1981 for escalation and for the procurement of equipment to support Electronic Warfare and Avionics Integration facilities. These are new initiatives made necessary by the increasing threat in the electronics area.

Personal Safety and Rescue Equipment - Provides anti-gravity garments, chemical and biological defense protection equipment in which we are badly deficient and miscellaneous items of life support equipment costing less than \$900,000 each. The FY 1982 program is slightly more than FY 1981 because of necessary emphasis placed upon chemical and biological defense protection equipment.

Depot Plant and Materials Handling Equipment - Includes Base Mechanization Equipment (BME) for five Air Logistic Centers and various air bases; Air Terminal Mechanization equipment for one overseas and three CONUS air freight terminals; and other maintenance and repair shop equipment costing less than \$900,000 each. All facilities and equipment directly support and reinforce our ability to conduct war time as well as peace time operations. The increase in FY 1982 program is an effort to prevent deterioration of our wholesale supply and maintenance facilities and to maintain equity with the advancing technology of our weapon systems.



Electrical Equipment - Provides generators and other electrical items costing less than \$90,000 each. The FY 1982 program increase accommodates the procurement of 60kW, 150kW, and 250kW generators, which are indispensable to the support of units deployed in combat areas and/or in foreign countries due to the incompatibility of commercial power with U.S. equipment.

Base Support Equipment - Provides local parents' investment equipment with a unit cost of \$3,000 or more and centrally procured equipment such as aircraft arresting barriers, cargo pallets, photographic equipment and spare and repair parts. The FY 1982 increase of \$12.1 million is mainly the result of increasing Medical & Dental Equipment to more adequately provide for medical service in peace and in war and Productivity Enhancement capital investment equipment to promote the national objective of increased productive and lowered operating costs.

Special Support Projects - Includes intelligence equipment and systems, industrial preparedness, and equipment modifications. An increase in the program for Selected Activities and the Special Update Program along with increases for various line items within the program accounts for the increase of \$475.9 million in this program over FY 1981. All of these requirements are based on the national assessments of risk in these areas.

# 1981 PROGRAM

## COMPARISON OF REQUIREMENTS AS SHOWN IN FY 1981 BUDGET WITH REQUIREMENT AS SHOWN IN FY 1982 BUDGET

### SUMMARY OF REQUIREMENT

	Program Requirements 1981 Budget	(In Thousands of Dollars) Program Requirements 1982 Budget	Increases (+) or Decreases (-)
Munitions and Associated Equipment	\$ 301,726	\$ 283,245	-18,481
Vehicular Equipment	162,002	162,002	N/C
Electronics and Telecommunications Equipment	723,400	694,466	-28,934
Other Base Maintenance and Support Equipment	1,809,750	1,865,659	+55,909
Reimbursable Program	193,774	193,774	N/C
Total Fiscal Year Program	\$3,190,661	\$3,197,146	+6,485

### EXPLANATION BY BUDGET ACTIVITY

#### 1. Munitions and Associated Equipment (\$-18.4 million)

Congress cut 30NM by \$8.9 million, and deleted FMB-112 (\$-9.5 million)

#### 2. Vehicular Equipment (N/C)

Various internal program adjustments have been made with no net change in the total vehicle program.

#### 3. Electronics and Telecommunications Equipment (\$-28.9 million)

Congress reduced the program by \$27 million. This included Defense Support Program (\$20 million), Tactical Signal Intelligence (\$4) and Air Force Satellite Communications (\$3 million), \$1.5 million was transferred to the Other Base Maintenance Program.

4. Water Base Maintenance and Support Equipment (+55.9 million)

Congress adjusted the program by \$4.4 million. This included Base Procured Equipment (-2.1 million), Medical and Dental Equipment (-3.2 million), and Selected Activities (\$+59 million). An additional \$1.5 million was transferred from Electronics and Telecommunications Equipment, and the Secretary of Defense added \$4.0 million for water treatment equipment.

5. Reinforcement Program (0/0)

COMPARISON OF FY 1981 FINANCING AS REFLECTED  
IN FY 1981 BUDGET WITH FY 1981 FINANCING AS  
SHOWN IN FY 1982 BUDGET

	(In Thousands of Dollars)		
	Financing Per FY 1981 Amended Budget	Financing Per FY 1982 Budget	Increase (+) or Decrease (-)
Program requirements.....	3,190,661	3,197,146	+6,485
Program requirements (Service account).....	(2,996,887)	(3,003,372)	(+6,485)
Program requirements (Reimbursable).....	(193,774)	(193,774)	(-)
Less:			
Anticipated reimbursements.....	193,774	193,774	-
Appropriation.....	2,996,887	3,003,372 <sup>a/</sup>	+6,485

<sup>a/</sup> Includes proposed supplemental of \$4,000 thousand.

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1981 program has been increased \$6,485 thousand since submission of the FY 1981 budget.

# 1980 PROGRAM

COMPARISON OF REQUIREMENTS AS SHOWN  
IN FY 1981 BUDGET WITH REQUIREMENT AS  
SHOWN IN FY 1982 BUDGET

## SUMMARY OF REQUIREMENTS

	(In Thousands of Dollars)		
	Program Requirements 1981	Program Requirements 1982	Increases (+) or Decreases (-)
Munitions and Associated Equipment	\$ 323,117	\$ 321,460	-1,657
Vehicular Equipment	171,479	166,181	-5,298
Electronics and Telecommunications Equipment	635,241	602,448	-32,793
Other Base Maintenance and Support Equipment	1,569,004	1,564,662	-4,342
Reimbursable Program	<u>252,453</u>	<u>239,695</u>	<u>-12,758</u>
Total Fiscal Year	\$2,951,294	\$2,894,446	-56,848

## EXPLANATION BY BUDGET ACTIVITY

### 1. Munitions and Associated Equipment (\$-1.7 million)

Congress approved reprogramming of \$11.4M and \$4.04 to Military Personnel and Operation and Maintenance respectively. Also approved was a transfer of \$16.1M from prior years to FY 1980 for the GBU-15. Congress disallowed \$2.4M of the FY 1980 supplement request.

### 2. Vehicular Equipment (\$-5.3 million)

\$3.6 million was reprogrammed to the Air National Guard Personnel Appropriation, and \$1.7 million was reprogrammed to the Operation and Maintenance, Air Force appropriation.

3. Electronics and Telecommunications Equipment (\$-32.8 million)

A \$28 million dollar reduction resulted from reprogramming to higher priority Air Force requirements. \$2 million was reprogrammed to the Operation and Maintenance, Air Force appropriation, \$1 million was transferred to the National Guard, \$1 million was transferred to the Claims Account, \$19 million was reprogrammed to Military Personnel Air Force appropriation, and \$5 million was reprogrammed to a Classified Project. Congress reduced the FY 1980 Supplemental Request by \$5 million.

4. Other Base Maintenance and Support Equipment (\$-4.3 million)

Congress approved reprogramming of \$2.1M from Other Procurement to Military Personnel. Congress disallowed \$7.2M of the FY 1980 Supplemental Request. The Secretary of Defense approved a \$5.0M (classified) transfer to this account.

5. Reimbursable Program (\$-12.7 million)

The decrease of \$12.7 is due to receipt of actual customer orders in FY 1979.

COMPARISON OF FY 1980 FINANCING AS REFLECTED  
IN FY 1981 BUDGET WITH FY 1980 FINANCING AS  
SHOWN IN FY 1982 BUDGET

	(In Thousands of Dollars)		
	Financing Per FY 1981 Amended Budget	Financing Per FY 1982 Budget	Increase (+) or Decrease (-)
Program requirements.....	2,951,294	2,894,446	-56,848
Program requirements (Service account).....	(2,734,841)	(2,654,751)	(-80,090)
Program requirements (Reimbursable).....	(252,453)	(239,695)	(-12,758)
Less:			
Anticipated reimbursements.....	252,453	239,705	-12,748
Transferred from other accounts.....	66,100a/	51,900	-14,200a/
Reappropriation.....	13,600	29,700	+16,100
Add:			
Transferred to other accounts.....	14,890	60,890	+46,000
Appropriation.....	2,634,031	2,634,031	-

a/ Includes proposed transfer to finance the FY 1980 proposed supplemental amendment.

EXPLANATION OF CHANGES IN FINANCING

The Fiscal Year 1980 Program has been decreased \$56,848 thousand since submission of the FY 1981 budget. Adjustments by category of financing are explained below:

1. Anticipated Reimbursements. The decrease of \$12,748 thousand is due to receipt of actual customer orders in FY 1980.
2. Transferred from other accounts. \$33,383 thousand was transferred from Shipbuilding and Conversion, Navy, FY 1980, and \$18,517 thousand was transferred from Aircraft Procurement, Air Force, FY 1980. Both transfers were in accordance with P.L. 96-304 of the FY 1980 Supplemental Appropriations Act.
3. Reappropriation. The increase of \$6,000 thousand is the result of redefining the Congressional directed transfer from FY 1978 Other Procurement, Air Force to FY 1980 Other Procurement, Air Force; and \$10,100 thousand from RDT&E, Air Force, FY 1979 to FY 1980 Other Procurement, Air Force, as a reappropriation.
4. Transferred to other accounts. \$1,400 thousand was transferred to Claims Defense Agencies FY 1980; \$32,829 thousand to Military Pers, Air Force FY 1980; \$4,500 thousand to ANG Pers, Air force FY 1980; and \$7,271 thousand to O&M FY 1980 in accordance with Section 734 of the FY 1980 DoD Appropriation Act.



ANALYSIS OF UNOBLIGATED BALANCES - 30 SEPTEMBER 1982  
SUMMARY BY CATEGORY  
(In Millions of Dollars)

	<u>FY 1981</u>	<u>FY 1982</u>	<u>Total</u>	<u>% of Total</u> <u>Unobligated</u>
1. <u>Military Interdepartmental Purchase Requests:</u> (MIPRs) . . . . .	\$40.2	\$55.2	\$95.4	5.4%
2. <u>Completing Contractual Arrangements:</u>				
a. Specification Definitions. . . . .	110.1	151.4	261.5	14.8%
b. Price Redeterminations . . . . .	48.3	66.5	114.8	6.5%
c. Definitization of Contracts. . . . .	119.9	164.6	284.5	16.1%
3. <u>Full Funding Policy:</u>				
a. Delayed/Revised Program Release. . . . .	344.5	473.5	818.0	46.3%
b. Engineering Changes. . . . .	81.1	111.5	192.6	10.9%
1/	\$744.1	\$1,022.7	\$1,766.8	
TOTAL UNOBLIGATED FY 1982				

1/ Includes \$1,560 thousand unobligated proposed supplemental appropriation

EXPLANATION

Procurement funds are available for obligation for three years because of the extensive lead time required to develop detailed specification, issue Requests for Proposals (RFPs) and to negotiate and finalize contracts for procurement of investment equipment. Unobligated balances are required for programmed and needed items on which contracts have not reached the obligational stage by the end of the fiscal year because of the procurement process.

The following are illustrative of the reasons which will cause unobligated balances at the end of each fiscal year:

1. Military Interdepartmental Purchase Requests (MIPRs) (\$95.4 million) - These documents are used to request one of the other military services to procure Air Force requirements in conjunction with their own or with those of another service. Funds to support these requests remain unobligated until notification of contract award is received from the other military service. Frequently, contractual arrangements will have been completed and the obligation incurred but notification from the other service is not received in time for recording in Air Force records prior to or at the end of a fiscal year.

2. Completing Contractual Arrangements:

a. Specification Definitions (\$261.5 Million) - Unobligated funds result when specifications for newly introduced items cannot be definitized in time to permit contract negotiation prior to or at the end of the fiscal year.

b. Price Redeterminations (\$114.8 million) - Prices are redetermined at intervals throughout the life of a contract. Final obligation for contracts must await negotiations on agreed target-ceiling formulae. In most large contracts, the rewards and penalties of multiple incentives (cost, performance and schedule) cannot be determined and obligated prior to the end of the fiscal year. Funds are reserved for these purposes when upward adjustments seem likely; however, obligation does not occur until a formal redetermination has been agreed upon and the contract amended. Unobligated funds at year end result.

c. Definitization of Contracts (\$284.5 million) - Procurements of complex systems and large material orders may occasionally be initiated under letter contracts. The letter contract generates a partial obligation of the total program value with the balance remaining committed but unobligated pending definitization and negotiation of the detailed contract terms. These actions can carry over the end of a fiscal year and result in unobligated funds.

3. Full Funding Policy - This policy, enunciated in DoD Directive 7200.4 (October 30, 1969) provides that adequate appropriations and funds must be available in a given fiscal year for obligation, committed or set aside in a reserve account in an aggregate amount sufficient to complete the procurement of a specified number of end items and advance procurement for approved programs. Unobligated balances at the end of a fiscal year are a consequence of this policy and accrue in the following categories:

a. Delayed/Revised Program Release (\$818.0 million) - Adjustments in quantities or specifications of other equipment to meet changing situations or to exploit engineering improvements generally require prior approval of reprogramming requests which can delay program release and direction until well into the fiscal year, thus delaying the obligation of funds by the end of the fiscal year. Also, approved and funded programs are sometimes delayed/undirected beyond 30 September pending decision on an aspect of the program that has arisen requiring resolution before proceeding.

b. Engineering Changes (\$192.6 million) - Based on prior experience with systems of like nature and complexities, provision is made in procurement programs, as a percentage of the estimated cost of the item, to cover engineering improvements and design changes which will occur as a result of manufacturing experience of Air Force requirements. Engineering changes are not definitive requirements known in advance and they cannot be obligated until the change is authorized and directed. These changes occur throughout the life of the production contract and result in unobligated balances.

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Nomenclature	P-1 Line Item No.	\$ Millions FY 82	Page No.	Nomenclature	P-1 Line Item No.	\$ Millions FY 82	Page No.
<u>MUNITIONS AND ASSOCIATED EQUIPMENT</u>							
Caliber .38	5	7.4	267	Truck, Stake/Platform	51	3.4	289
20MM Training	7	13.0	268	Truck, Cargo-Utility 3/4T, 4x4	52	4.7	290
30MM Training/30MM HEI/ 30MM API Cartridges	8, 9, 10	128.9	269	Truck, Pickup, 1/2T, 4x2	54	3.7	291
Chaff RR-170 Cartridge	11	4.3	270	Truck, Pickup, Compact	55	5.6	292
MXU-4A/A Engine Starter	13	11.3	271	Truck, Panel, Multi-stop	56	5.8	293
Cartridge, Impulse CCU-44B	14	4.7	272	Truck, Panel, 4x2	57	3.1	294
MK-82 Bomb, Empty	16	18.7	273	Truck, Carry-All	58	3.2	295
BSU-49 Inflatable Retarder	17	17.2	274	Truck, Cargo, 2 1/2 T, 6x6, M35	59	13.1	296
BSU-50 Inflatable Retarder	18	9.9	275	Truck, Cargo 5 T, M813	60	11.6	297
Cluster Bomb, MK-20(Rockeye)	19	25.0	276	Truck, Tractor, Over 5 T	66	6.1	298
Laser Bomb Guidance Kits	20	51.6	277	Truck, Dump, 5 T	68	9.8	299
GBU-15	21	51.3	278	Truck, Telephone Maintenance	71	3.4	300
Bomb, Practice, BDU-33	22	32.3	279	Truck, Tank, Fuel, 5,000 Gal, R-9	73	33.8	301
Aerial Tow Target	26	8.5	280	Truck, Tank, Fuel, M-49	74	5.2	302
Flare, IR, MJU-7B	29	4.1	281	Truck, Oversnow, Tracked	76	3.3	303
M-206 Cartridge Flare	31	14.8	282	Truck, A/C Tow, MB-2	77	6.5	304
B-83 Trainer	33	6.8	283	Tractor, Tow, Flightline	79	6.6	305
FMU-112	40	9.7	284	Truck, Forklift, 4,000 lb GED/DED 144"	89	3.2	306
MK-339 Mech Time	41	7.1	285	Truck, Forklift, 6,000 lb	90	5.8	307
<u>VEHICULAR EQUIPMENT</u>							
Bus, 28 Passenger	45	4.0	286	Truck, Forklift, 10,000 lb	91	10.9	308
Bus, 44 Passenger	47	4.8	287	25K A/C Loader	94	3.5	309
Truck Ambulance	49	3.0	288				

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Nomenclature	P-1 Line Item No.	\$ Millions FY 82	Page No.	Nomenclature	P-1 Line Item No.	\$ Millions FY 82	Page No.
Wideband Systems Upgrade	167	11.8	349	Chemical and Biological Defense Program	201	16.6	360
Training Support Equipment	173	33.4	350	Base Mechanization Equipment	203	13.7	361
Planned Position Indicator (PPI) Scope	174	6.1	351	Generators, 200kw	206	4.4	362
Tactical C-E Equipment	176	13.6	352	Power Plant A/E 24 U-8	209	4.2	363
Radio Equipment	178	11.7	353	Base Procured Equipment	211	27.7	364
Communications-Electronics				Medical and Dental Equipment	212	38.7	365
Class IV Modifications	181	22.5	354	Barrier Aircraft			
Traffic Control and Handling				Arresting System	215	4.4	366
System (TRACALS) Modifications	182	4.3	355	Central Aircraft Support			
Ballistic Missile Early Warning System (BMEWS)	184	8.5	356	System (CASS)	216	3.1	367
				Pallet, Air Cargo, 108"x88"	217	10.3	368
				Productivity Enhancement	224	10.0	369
				RDF Mobility Equipment	226	12.4	370
				Scientific/Technical			
				Intelligence	230	3.1	371
Base/ALC Calibration Package	186	4.6	357	Air Force Technical			
Signal Generator, 0.5 to 512 MHZ	189	6.1	358	Application Center	232	11.8	372
Laser Acquisition Device (LAD)	200	6.6	359	Photo Processing/			
				Interpretation System	233	5.8	373
				Industrial Preparedness	237	10.5	374

OTHER BASE MAINTENANCE AND SUPPORT EQUIPMENT

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 5

Nomenclature: Caliber .38

Mission/Description: This cartridge is used in the caliber .38 special revolver. It is the small arms training round used to train all USAF personnel who are required to be qualified in the use of this revolver, i.e., aircrews, security, base defense and mobility personnel.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
29,594	5.6	-	-	32,278	7.4

Basis for FY 1982 Request: The request is required to support projected peacetime consumption during the FY 1982 funded delivery period, and maintain pipeline stock levels.

Note: Quantities in thousands

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 7

Nomenclature: 20 MM Training

Mission/Description: The 20 MM ammunition with inert projectiles is used for training aircrews on a variety of aircraft gun systems.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
7,987	21.6	2,471	9.3	3,557	12.9

Basis for FY 1982 Request: The request is required to support projected peacetime consumption during the FY 1982 funded delivery period, and maintain pipeline/stock levels.

NOTE: Quantities in thousands



OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 8, 9, 10

Nomenclature: 30 MM Training/30 MM HEI/30 MM API Cartridges

Mission/Description: The 30 MM Cartridge used with the GAU-8 Gun System is designed to be effective against a broad spectrum of close Air Support (CAS) targets. The GAU-8 is specifically designed to defeat Soviet medium/heavy tanks, which are critical CAS targets in a European conflict. The gun is effective against softer CAS targets, such as personnel, armored personnel carriers, and trucks. The GAU-8 gun fire can be placed closer to friendly troops than other weapons due to its accuracy, small lethal radius, and low probability of gross error. This contributes to the effectiveness of the A-10 aircraft for which it was designed.

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
Training	3,450	30.1	3,500	37.2	3,500	40.5
High Explosive	1,458	18.8	500	8.6	500	10.8
Inert (HEI)						
Armor Piercing	5,883	98.1	3,100	65.2	3,100	77.6
Inert (API)						

Basis for FY 1982 Request: The request is required to support projected peacetime consumption during the FY 1982 funded delivery period, maintain pipeline/stock levels, and procure an increment of the WRM inventory objective.

Notes: Quantities in Thousands

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 11

Nomenclature: Ch AN-17C Cartridge

Mission/Description: The cartridge is used to expel chaff as an electronic countermeasure against radar controlled threats. The chaff is ejected from an AN/ALE-40 dispenser on the A-7, A-10 and F-4 aircraft.

Cost Data:

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
	1,358	4.7	-	-	1,906	4.3

Basis for FY 1982 Request: Required to support projected peacetime consumption during the FY 1982 funded delivery period and procure an increment of the War Reserve Materiel (WRM) inventory objective.

Note: Quantities in thousands

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 13

Nomenclature: MXU-4A/A Engine Starter

Mission/Description: The MXU-4A/A engine starter is installed in aircraft starter assemblies to start turbojet engines on B-52, KC-135, F-111, F-4, F-105 and F-106 aircraft.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
8	.9	35	4.1	90	11.3

Basis for FY 1982 Request: To support peacetime requirements during the FY 1982 funded delivery period without drawing down peacetime operating and War Reserve Material (WRM) stock levels.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

2-1 Line Item: 14

Nomenclature: Cartridge, Impulse CCU-44/B

Mission/Description: This cartridge replaces the ARD-863-1 impulse cartridge. It is used on the A-7, A-10, B-52, F-15 and F-16 to jetison aircraft external stores such as bombs and rockets.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	1,331	3.5	1,536	4.7

Basis for FY 1982 Request: To support projected peacetime consumption during the FY 1982 funded delivery period, maintain pipeline/stock levels, and procure an increment of the War Reserve Materiel (WRM) inventory objective.

Note: Quantities in thousands

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 16

Nomenclature: MK-82 Bomb, Empty

Mission/Description: This is a 500 pound general purpose bomb filled with concrete, vermiculite or sand to simulate the drop trajectory of a high explosive bomb. It is used for aircrew training with proficiency.

Cost Data:

(In Millions of Dollars)						
	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
14,196		6.2	20,000	10.0	35,000	18.7

Basis for FY 1982 Request: The request is required to support projected peacetime consumption during the FY 1982 funded delivery period and maintain a pipeline/stock levels.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 17

Nomenclature: BSU-49 Inflatable Retarder

Mission/Description: The BSU-49 Inflatable Retarder provides the USAF with the capability for supersonic, low-level delivery of MK-82 500 pound general purpose bombs. The pilot has the option of either high or low drag release. It consists of two major assemblies; a low drag stabilizer and a ram-air inflated retardation device which is stored in the stabilizer when not deployed.

Cost Data:

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
	1,009	3.6	3,300	4.9	22,997	17.2

Basis for FY 1982 Request: The FY 1982 request provides for an increment of War Reserve Materiel (WRM) stocks.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 16

Nomenclature: B5U-50 Inflatable Retarder

Mission/Description: An inflatable retarder for the MK-84 bomb employed in either high or low drag modes, at the pilot's option. The two main assemblies are the high drag retarder and low drag stabilizer. The stabilizer is based on a conventional cruciform finned structure. The retarder is a ram-air inflated enclosed vehicle made of nylon fabric and webbing construction which will be stored within the stabilizer.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	200	2.1	4,800	9.9

Basis for FY 1982 Request: The FY 1982 program will procure an increment of the War Reserve Materiel (WRM) inventory objective.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 19

Nomenclature: Cluster Bomb, MK-20 (Rockeye)

Mission/Description: This is a free-fall weapon consisting of a MK-7 dispenser with a MK-339 fuze. The dispenser is loaded with 247 MK-118 anti-tank bombs. The fuze initiates a linear shaped charge which cuts the dispenser into two halves allowing the MK-118 bomb's to spread in free-fall trajectories. The MK-118 bombs require 130 to 200 knots velocity to arm and when the bomb strikes a hard target, the electronic detonator ignites the shaped charge warhead.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
7,200	21.1	-	-	7,200	25.0

Basis for FY 1982 Request: The request is required to support projected peacetime consumption during the FY 1982 funded delivery period, maintain pipeline/stock levels, and to procure an increment of the War Reserve Materiel (WRM) inventory objective.



OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 20

Nomenclature: Laser Bomb Guidance Kit

Mission/Description: The laser bomb guidance kit consists of a field installed computer control group and an airfoil group for MK-82, MK-83 or MK-84 bomb. The control group uses a silicon seeker head which detects laser energy reflected from a target being illuminated by either a ground or an airborne laser target designator and directs the laser guided bomb on a line-of-sight trajectory to the target.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
4,300	28.1	4,300	31.9	4,300	51.6

Basis for FY 1982 Request: Required to support projected peacetime consumption during the FY 1982 funded delivery period, maintain pipeline/stock levels, and procure an increment of the War Reserve Materiel (WRM) inventory objective.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 21

Nomenclature: GBU-15

Mission/Description: The GBU-15 Modular Guided Weapon System is a family of guidance, control, and airframe modules which, when combined with a warhead, can be configured as different weapons tailored for various attack and target conditions. The Cruciform Wing Weapon (CWW) is optimized for low angle attack. The data link permits the launch crew to monitor progress of the weapon to the target and to update the impact point, if necessary.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
35	16.1	65	20.7	240	51.3

Basis for FY 1982 Request: The FY 1982 program will procure an increment of the War Reserve Materiel (WRM) inventory objective.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 22

Nomenclature: Bomb, Practice, BDU-33

Mission/Description: The 25-pound practice bomb has a teardrop shaped metal body with a tube cavity lengthwise through the center, a conical afterbody, and a cruciform type fin in the aft end of the bomb body. A firing pin, inertia tube, flag assembly and cotter pin are separate components of the bomb body. This bomb is used to provide the Tactical Air Force with aircrew weapons delivery training.

Cost Data:

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
	866,920	10.9	842,560	12.2	1,724,560	32.3

Basis for FY 1982 Request: The request is required to support projected peacetime consumption during the FY 1982 funded delivery period, and maintain pipeline/stock levels.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 26

Nomenclature: Aerial Tow Target

Mission/Description: The Aerial Tow Target System will be employed as a towed aerial target for use by tactical fighters and interceptor aircrews in developing and maintaining air-to-air gunnery skills. The system will also be used in operational testing and evaluation of guns, gunsights, ammunition, and in tactics development.

Cost Data:

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
	142	3.2	600	6.7	642	8.5

Basis for FY 1982 Request: Procurement is required to support projected peacetime consumption during the FY 1982 funded delivery period and maintain pipeline/stock levels.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 29

Nomenclature: Flare, IR, MJU-7B

Mission/Description: The MJU-7B is an infra-red countermeasures flare used by the F-4 aircraft to counter heat seeking missiles. It is dispensed from the AN/ALE-40(V).

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	72,420	4.0	82,000	4.1

Basis for FY 1982 Request: Procurement required to support projected peacetime consumption during the FY 1982 funded delivery period, maintain pipeline/stock levels, and procure an increment of the War Reserve Materiel (WRM) inventory objective.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 31

Nomenclature: M-206 Cartridge Flare

Mission/Description: The flare is designed for the AN/ALE-40(V) countermeasures dispenser system. It will provide self-protection against homing threats for the HH-3, A-7 and A-10 aircraft.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	1,000,000	14.6	1,000,000	14.8

Basis for FY 1982 Request: The request is required to support projected peacetime consumption during the FY 1982 funded delivery period, maintain pipeline/ stock levels, and procure an increment of the War Reserve Materiel (WRM) inventory objective.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 33

Nomenclature: B-83 Trainer

Mission/Description: A strategic gravity bomb produced by Department of Energy for use in nuclear training. Various configurations are used in training for explosive ordinance disposal, maintenance, loading and handling personnel. The training is essential for developing and maintaining proficiency.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	25	3.0	66	6.8

Basis for FY 1982 Request: The inventory objective is 91 of which all will be on hand at the end of the FY 1982 funded delivery period.

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DEPARTMENT OF THE AIR FORCE JUSTIFICATION OF ESTIMATES FOR FISC--ETC(U)  
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OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 40

Nomenclature: FMU-112

Mission/Description: This is an electronic impact or short delay fuze designed to fit the standard 3-inch fuze well on bombs such as the M-117 and the MK-80 series guided or unguided bombs. It is usable on both high and low performance aircraft.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
3000	10.0	-	-	5300	9.7

Basis for FY 1982 Request: Procurement is required to support projected peacetime consumption during the FY 1982 funded delivery period and procure an increment of the War Reserve Materiel (WRM) inventory objective.

OTHER PROCUREMENT, AIR FORCE

MUNITIONS DATA SHEET

P-1 Line Item: 41

Nomenclature: MK-339 Mech Time

Mission/Description: The MK-339 is a mechanical time fuze used with chaff and leaflet bombs and cluster munitions which utilize the SUU-30 dispenser. It provides two pre-set pilot-selectable delay fuze function times (arming wires) each settable from 1 to 50 seconds in calibrated 0.1 second increments.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	17,247	4.5	25,000	7.1

Basis for FY 1982 Request: Procurement is required to support projected peacetime consumption during the FY 1982 funded delivery period, to maintain pipeline/stock levels and to procure fuzes for selected cluster munitions currently in the War Reserve Materiel (WRM) stockpile to increase their operational effectiveness.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 45

Nomenclature: Bus, 28 Passenger

Mission/Description: This commercial bus eq ips our bases with a fuel efficient diesel vehicle for base shuttle bus operations and transport of large aircraft crews and related flight gear. It is also used to transport dependent school children as well as large groups during military exercises.

Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	Qty	Qty	Qty
	Amt	Amt	Amt
	56	61	107
	1.8	2.2	4.0

Basis for FY 1982 Request: The inventory objective is 1421 with a procurement requirement of 513 through the FY 1982 funded delivery period. 107 are budgeted in FY 1982, deferring 406 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 47

Nomenclature: Bus, 44 Passenger

Mission/Description: This commercial bus supplies our bases with a large capacity, fuel efficient, diesel vehicle which is used primarily as a school bus for dependent children. It is used also to transport passengers to and from aircraft and terminals where distant aircraft parking or weather dictates.

Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	Qty	Qty	Qty
	Amt	Amt	Amt
	39	24	81
	2.8	1.9	4.8

Basis for FY 1982 Request: The inventory objective is 643 with a procurement requirement of 316 through the FY 1982 funded delivery period. The FY 1982 budget quantity is 81, deferring 235 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 49

Nomenclature: Truck Ambulance

Mission/Description: This is a commercial chassis, four wheel drive, field ambulance, powered by a gasoline engine. It performs medical evacuation and movement of patients under field conditions and in aircraft crash rescue operations, is equipped with medical life support equipment and air conditioning, and has sufficient capability for four litter patients or eight seated patients.

Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	Qty	Qty	Qty
	Amt	Amt	Amt
	-	90	102
	-	2.5	3.0

Basis for FY 1982 Request: The inventory objective is 640 with a procurement requirement of 252 through the FY 1982 funded delivery period. The FY 1982 quantity is 102 deferring 150 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 51

Nomenclature: Truck, Stake/Platform

Mission/Description: This vehicle is a gasoline engine driven, commercial vehicle with enclosed cab, steel and wood body, and removable stake siding and end boards. Much of its use entails delivery of critical parts, equipment and other cargo to flight line maintenance activities, hospitals, and other base supply customers. It is purchased primarily in the 1 1/2 ton 4x2 configuration, however, where mission permits, the downsized 1 ton version is purchased for increased fuel economy and maneuverability.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
505	4.1	326	3.8	291	3.4

Basis for FY 1982 Request: The inventory objective is 4,513 with a procurement requirement of 828 through the FY 1982 funded delivery period. 291 are budgeted in FY 1982, deferring 537 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 52

Nomenclature: Truck, Cargo-Utility, 3/6T, 4x4

Mission/Description: A commercial, four-door, six passenger cargo truck with four wheel drive and automatic transmission. The vehicle is used in direct support of strategic weapons systems (silo crew changes), fighter and bomber aircraft alert crews and safety personnel. The four wheel drive is critical to off-highway winter operations to isolated missile, communications, weather and radar sites. This vehicle permits crews and tools/cargo to travel together, precluding the need for two vehicles for trips to sites up to 150 miles from a base.

Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	Qty	Qty	Qty
	Amt	Amt	Amt
	256	235	426
	2.4	2.5	4.7

Basis for FY 1982 Request: The inventory objective is 2619 with a procurement requirement of 747 through the FY 1982 funded delivery period. 426 are budgeted in FY 1982, deferring 321 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 54

Nomenclature: Truck, Pickup 1/2T, 4x2

Mission/Description: This is a standard commercial 1/2 ton pickup truck with a six cylinder gasoline engine, two wheel drive and an automatic transmission. In addition to general transportation of cargo and personnel, it supports flight line, base maintenance, supply and security police operations.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
732	4.2	1087	6.6	450	3.7

Basis for FY 1982 Request: The inventory objective is 9198 with an FY 1982 procurement requirement of 3248. 450 are budgeted in FY 1982, deferring 2,798 to subsequent years.



OTHER PROCUREMENT, AIR FORCE  
VEHICULAR DATA SHEET

P-1 Line Item: 55

Nomenclature: Truck, Pickup, Compact

Mission/Description: A commercial, 4x2 compact pickup truck, used by virtually all base activities to transport light cargo and personnel. Where possible it replaces the 1/2 ton pickup truck as part of an Air Force program to selectively downsize to more fuel efficient vehicles without causing adverse mission impact.

Cost Data:

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
	461	2.4	694	3.4	1073	5.6

Basis for FY 1982 Request: The inventory objective is 4281 with a procurement requirement of 2344 through the FY 1982 funded delivery period. 1073 are budgeted in FY 1982, deferring 1271 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 56

Nomenclature: Truck, Panel, Multi-stop, 1T 4x2

Mission/Description: This is a commercial panel truck with sliding front doors, double rear doors, two wheel drive, automatic transmission, powered by a six cylinder or larger gasoline engine. It is used for light cargo transport, mobile post offices and air crew personnel transport. It is used extensively on the flight line to support aircraft maintenance and by civil engineers in base and airfield maintenance.

Cost Data:

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
	311	2.7	300	3.0	576	5.8

Basis for FY 1982 Request: The inventory objective is 4601 with a procurement requirement of 1832 through the FY 1982, funded delivery period, deferring 1256 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 57

Nomenclature: Truck, Panel, 4x2

Mission/Description: This is a gasoline engine, two wheel drive, steel bodied vehicle modified with secured compartments for tools, supplies and an overhead ladder rack for telephone maintenance, installation and utility operations. It is a productivity enhancement vehicle in that tools and bench stock supplies are available to the craftsmen without additional order/transportation delays.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
49	.4	180	1.2	450	3.1

Basis for FY 1982 Request: The inventory objective is 1830 with a procurement requirement of 855 through the FY 1982 funded delivery period. 450 are budgeted in FY 1982, deferring 405 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 58

Nomenclature: Truck, Carryall

Mission/Description: This is a commercial carryall, capable of carrying a minimum of eight passengers (including driver). The vehicle is used by communication, weather and radar sites as a combination cargo and group personnel carrier; by medical repair teams, to transport test and repair equipment to hospitals and medical facilities; by SAC missile and aircraft alert crews; and in some instances as airport transportation for personnel and their luggage.

Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	Qty	Qty	Qty
	Amt	Amt	Amt
	254	326	336
	2.2	2.8	3.2

Basis for FY 1982 Request: The inventory objective is 2538 with a requirement of 841 through the FY 1982 funded delivery period. The FY 1982 budget quantity is 336, deferring 505 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 59

Nomenclature: Truck, Cargo 2 1/2T, 6x6, M35

Mission/Description: This vehicle is of military design with open or closed cab and with lattice type side extensions. It is multi-fuel engine driven, with six wheel drive, used to haul cargo and equipment, transport troops and their gear, and to tow trailers up to 10,000 lb. It will also be used in support of GLCM (Ground Launched Cruise Missile) operations.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	186	6.5	351	13.1

Basis for FY 1982 Request: The inventory objective is 3474 with a procurement requirement of 2346 through the FY 1982 funded delivery period. 351 are budgeted in FY 1982, deferring 1995 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 60

Nomenclature: Truck, Cargo 5T, M813

Mission/Description: This is a military design, 5 ton, DED, 6x6 truck with a driving front axle, manual engagement, and 2 driving rear axles. It is an all terrain vehicle used to transport personnel and cargo. Assigned primarily to USAF tactical mobility forces, it is the primary transport for the AN/TPN radar set which is integral and critical to the bare base concept.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
41	1.9	93	4.6	191	11.6

basis for FY 1982 Request: The inventory objective is 701 with a procurement requirement of 399 through the FY 1982 funded delivery period. The FY 1982 budget quantity is 191, deferring 208 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 66

Nomenclature: Truck, Tractor over 5T

Mission/Description: This vehicle classification includes diesel, commercial truck tractors over 5 tons capacity. They are used for towing critical direct mission support equipment such as: MSC-1 mobile radar tracking vans; SAC LGM-30 missile trailers; liquid oxygen and nitrogen trailers; and the Air Force Orientation Group audio-visual equipment van.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
130	5.3	131	6.2	135	6.1

Basis for FY 1982 Request: The inventory objective is 1484 with a procurement requirement of 566 through the FY 1982 funded delivery period. 135 are budgeted in FY 1982, deferring 431 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 68

Nomenclature: Truck, Dump 5 Ton

Mission/Description: This is a standard commercial dump truck, which is purchased in 4x2, 4x4 and 6x4 drive chassis configurations. It is used to haul and dump cleared materials such as dirt, rocks, trees, stumps and brush; to spread surfacing material; to clear snow from taxiways, runways, and roadways; and for Rapid Runway Repair (RRR) and Red Horse operations.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
46	1.8	151	4.2	313	9.8

Basis for FY 1982 Request: The inventory objective is 2046 with a procurement requirement of 564 through the FY 1982 funded delivery period. 313 are budgeted in FY 1982, deferring 251 to subsequent years.



OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 71

Nomenclature: Truck, Telephone Maintenance

Mission/Description: A standard commercial telephone line maintenance/construction unit with earth auger, hydraulic rotating derrick and a telescoping boom with fiberglass extension and insulated workman's basket. The vehicle is used to quickly construct, service or repair telephone line communications systems worldwide. A critical support item to the worldwide communication network, it is purchased in a low profile, air transportable 6X4 model.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
24	2.8	13	1.8	20	3.4

Basis for FY 1982 Request: The inventory objective is 335 with a procurement requirement of 190 through the FY 1982 funded delivery period. 20 are budgeted in FY 1982, deferring 170 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 73

Nomenclature: Truck, tank, Fuel, 5,000 Gal, K-9

Mission/Description: This is a 5,000 gallon diesel engined refueling truck designed to deliver fuel to aircraft by either single point or over the wing method. It is the primary aircraft fuel servicing vehicle in the inventory. It is compatible with all inventory aircraft and is used to support every command

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
175	14.1	120	10.5	360	33.8

Basis for FY 1982 Request: The inventory objective is 2066 with an FY 1982 procurement requirement of 1209. The FY 1982 budget quantity is 360 with 849 deferred to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 74

Nomenclature: Truck, Tank, Fuel, M-49

Mission/Description: A six wheel drive M-series vehicle with a steel tank of 1200 gallon capacity. It is capable of transporting, pumping and metering gasoline, diesel and heating fuels in a tactical environment. This vehicle is essential in support of electronic installation, combat communications and tactical air support units.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
16	.9	44	2.8	76	5.2

Basis for FY 1982 Request: The inventory objective is 272 with a procurement requirement of 142 through the FY 1982 funded delivery period. The FY 1982 budget quantity is 76, deferring 66 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 76

Nomenclature: Truck Oversnow, Tracked

Mission/Description: This is a full track, all terrain vehicle used for removal of snow from runways, ramps, streets and other areas. It is capable of carrying cargo and up to ten passengers. Vehicle is powered by a 426 CID engine developing 200 HP. Steering is hydrostatic. Tracks may move in opposite directions permitting a turning radius of 0 ft. TAC is the only user of this vehicle. Use will be primarily at the DEW Line sites. The vehicle may also be used in rescue operations.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	38	3.3

Basis for FY 1982 Request: The inventory objective is 38 with a procurement requirement of 38 through the FY 1982 funded delivery period. 38 are budgeted in FY 1982, deferring none to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 77

Nomenclature: Tractor, A/C Tow MB-2

Mission/Description: A commercial tractor with a diesel engine and four wheel drive and steer. It tows aircraft up to 500,000 pounds including B-52 bombers and large cargo/refueling aircraft such as the C-141 and KC-135. These vehicles significantly enhance launch, turnaround and aircraft maintenance capability.

Cost Data:

(In Millions of Dollars)			
FY 1980		FY 1981	
Qty	Amt	Qty	Amt
56	3.9	61	4.7
		80	6.5

Basis for FY 1982 Request: This is a critical item because spares are no longer available to support the 1958-66 models in the current inventory. The inventory objective is 471 with a procurement requirement of 197 through the 1982 funded delivery period. The FY 1982 budget quantity is 80, deferring 117 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 79

Nomenclature: Tractor, Tow, Flightline

Mission/Description: This vehicle has a standard commercial chassis equipped with 6 cylinder gasoline engine, automatic transmission and dual rear wheels. The wheelbase is shortened, and ballast, protective rails and other devices are added to make it suitable for towing support equipment. Primary use of this tractor is towing and positioning support equipment around aircraft; however, when equipped with special trailer connections, it is also used for towing munitions trailers.

Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
	106	229	372
	1.6	3.8	6.6

Basis for FY 1982 Request: The inventory objective is 2590 with a procurement requirement of 1003 through the FY 1982 funded delivery period. 372 are budgeted in FY 1982, deferring 631 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 89

Nomenclature: Truck, Forklift, 4000 lb GED/DED 144"

Mission/Description: This commercial forklift has a diesel engine and a telescoping mast assembly which permits reaching heights from 68" to 144". It replaces both the 4000 pound standard mast forklift and 4000 pound low-mast forklift. It is the basic general cargo handling forklift for traffic management operations, warehouses, and materials holding areas. This is a productivity enhancement vehicle which permits better utilization and efficiency of personnel and fuel.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
400	6.3	189	3.5	143	3.2

Basis for FY 1982 Request: The inventory objective is 1911 with a procurement requirement of 867 through the FY 1982 funding delivery period. The FY 1982 budget quantity is 143, deferring 724 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 90

Nomenclature: Truck Forklift, 6000 lb

Mission/Description: This is a 6000-lb commercial forklift with pneumatic tires and 168" lift capability. It is used for munitions handling, aerial port operations, base supply warehouses, maintenance shop and materials holding area support AF-wide. The equipment is purchased in electric, gasoline and diesel engine models, as well as in a rough-terrain configuration. The rough-terrain model is a support vehicle for USAF mobility units for use in forward area deployments.

Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	Qty	Qty	Qty
	Amt	Amt	Amt
	129	142	164
	3.7	4.7	5.8

Basis for FY 1982 Request: The inventory objective is 1764 with a procurement requirement of 677 through the FY 1982 funded delivery period. The FY 1982 budget quantity is 164, deferring 513 to subsequent years.



OTHER PROCUREMENT, AIR FORCE  
VEHICULAR DATA SHEET

P-1 Line Item: 91

Nomenclature: Truck, Forklift, 10,000 lb

Mission/Description: These 10,000 lb commercial forklifts are used as the basic 463L system support vehicle to handle 108"x88" pallets in conjunction with pallet trailers. The vehicle is compatible with, and supports all strategic and tactical airlift aircraft except the wide-body Civil Reserve Air Fleet aircraft. It is purchased in two configurations, the dual 150" lift, 72" tine configuration with lateral shift capability and, in a rough terrain configuration.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
406	17.7	151	7.0	215	10.9

Basis for FY 1982 Request: The inventory objective is 1824 with a procurement requirement of 466 in FY 1982. 215 are budgeted in FY 1982, deferring 251 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 94

Nomenclature: 25K A/C Loader

Mission/Description: This vehicle is diesel powered, C-130 air transportable, and has an adjustable conveyORIZED cargo platform. It is used at major air cargo terminals for mechanized loading/off loading and ground transport of palletized air cargo; and provides minimum turn around time for C-5, C-130 and C-141 cargo aircraft.

Cost Data:

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
	50	6.2	23	3.1	24	3.5

Basis for FY 1982 Request: The inventory objective is 437 with a procurement requirement of 364 through the FY 1982 funding delivery period. The FY 1982 budget quantity is 24, deferring 340 to subsequent years. A remanufacture program will satisfy 312 of the deferred quantity.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 98

Nomenclature: Loader Scoop

Mission/Description: This family of vehicles is defined as a diesel engine commercial scoop type front end loader of 1 1/2, 2 1/2 or 4 cubic yard capacity. It is used by Civil Engineering for base maintenance, construction/repair, bulk handling (rocks, sand, gravel), and snow removal, excavating, trenching and sanitary fill support at bases worldwide. It is also slated for Rapid Runway Repair (RRR) in Europe and the Red Horse Modernization project. It comes in either pneumatic tired 4x4 or tracked configuration, depending on mission requirements.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
68	3.6	53	2.8	59	4.2

Basis for FY 1982 Request: The inventory objective is 758 with a procurement requirement of 282 through the FY 1982 funded delivery period. The FY 1982 budget quantity is 59, deferring 223 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 101

Nomenclature: Cleaner, Runway/Street

Mission/Description: A commercial sweeper used on all airfield surfaces and streets to control foreign object damage to aircraft tires and engines, and to sweep snow. One model is a component of the Rapid Runway Repair (RRR) sets. The equipment is purchased in both the towed rotary sweeper configuration and a self-propelled vacuum suction model. During winter operations the snow sweeper is a direct mission support vehicle at SAC and TAC bases.

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
78	3.1	69	2.9	75	3.0

Cost Data:

Basis for FY 1982 Request: The inventory objective is 974 with a procurement requirement of 299 through the FY 1982 funded delivery period. The FY 1982 budget quantity is 75, deferring 224 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 104

Nomenclature: Crane, 7-50 Ton

Mission/Description: This line consists of commercial cranes, most of which are diesel powered, hydraulically operated with 7-50 ton capacities. The major users are civil engineering, munitions and aircraft maintenance. Specific mission requirements are: heavy cargo lifting, earth moving/construction, munitions handling, SAC silo missile changes, ATC missile change training, aircraft engine changes, ship loading/offloading, and aircraft crash recovery operations. Requirements have been reviewed and a number of the vehicles downsized to take advantage of specific state-of-the-art developments.

Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
	45	41	49
	4.0	3.9	4.2

Basis for FY 1982 Request: The inventory objective is 532 with a procurement requirement of 143 through the FY 1982 funded delivery period. The FY 1982 budget quantity is 49, deferring 94 to subsequent years.

OTHER PROCUREMENT, AIR FORCE

VEHICULAR DATA SHEET

P-1 Line Item: 108

Nonenclature: Modifications

Mission/Description: Provides for modification and remanufacture of vehicles to extend life expectancy, correct deficiencies, and avoid costly replacement programs.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
--	3.3	--	5.7	--	7.7

Basis for FY 1982 Request: To continue efforts begun in previous years. The largest projects are the modification remanufacture of the 25K Loader and the P-2 crash fire truck.

OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 110

Nomenclature: Space Systems

Mission/Description: The Air Force is the single manager for all COMSEC equipment used in U.S. space systems. It includes the ground communications security (COMSEC) equipment required to protect command uplinks, telemetry down-links and mission information links of DOD Space programs.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	8.4	-	16.5	-	39.7

Basis for FY 1982 Request: To provide funding for procurement of equipments for satellite control facility and special projects.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 112

Nomenclature: Tactical Secure Voice

Mission/Description: The Tactical Secure Voice Line provides vinson, parkhill and bancroft equipments and ancillaries for the vinson/parkhill implementation plan. It will provide security for transmitting flash intelligence mission planning, coordination, readiness conditions, status reports, and strike reports within the Tactical Air Control System to aid force component headquarters.

Cost Data:

\* (In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	Qty	Qty	Qty
	Amt	Amt	Amt
-	10.6	-	-
		3.8	4.0

Basis for FY 1982 Request: Procurement of equipments to support Tactical Air Control Systems of the Tactical Air Force and Military Airlift Command.



OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 114

Nomenclature: Tri-TAC

Mission/Description: Tri-Tac is a multi-service DOD directed effort to develop/procure a new generation joint tactical communications system to include trunking, switching, system control, local distribution, individual terminal, system interface, and transmission equipments.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	3.8	-	.9	-	11.7

Basis for FY 1982 Request: Procurement of COMSEC equipment to support 36EA 18C-120 (TROPO), 5EA 11C-39 (CR1 switch), 16EA TDF (Tactical Fax) and individual terminal transition for Air Force users.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 122

Nomenclature: Traffic Control and Landing

Mission/Description: This program provides ground facilities and equipment (fixed and mobile) necessary to provide safe, orderly and expeditious USAF aircraft movements. Included are systems necessary for the DOD mission but not provided by the FAA in major functional areas: enroute and terminal navigation, approach and landing, air traffic control communications, and necessary interface with other systems (both National and International).

Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	Qty	Qty	Qty
	Amt	Amt	Amt
	- 10.0	- 8.9	- 7.0

Basis for FY 1982 Request: Procurement of new communications control system for USAF air traffic control facilities. The systems will allow replacement of existing obsolete government owned systems.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 125

Nomenclature: Tactical Air Control System Improvement (TACS1)

Mission/Description: This program provides tactical commanders with all mobile communications and electronic equipment required to control deployed tactical forces. This equipment is necessary for Commanders to effectively execute and control all tactical air operations such as counter air, interdiction, close air support, tactical air reconnaissance, tactical airlift, and air traffic control.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	8.4	-	8.9

Basis for FY 1982 Request: Procurement of System Trainer and Exercise Modules. The deployable sets will be used to train TACS operations personnel in various mission functions associated with simulated air battle situations.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 124

Nomenclature: Weather Observation/Forecast

Mission/Description: A continuing program for acquisition of meteorological/space environmental equipment required by the Air Force air weather service to support the worldwide mission of Air Force and Army operational force with specialized weather information. Equipment are both fixed and mobile in order to provide observing and forecasting services at the base/post level and for field deployments.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	2.3	-	-	-	4.8

Basis for FY 1982 request: Provides funds to replace 20-30 year-old meteorological equipment which impacts flight safety, such as Altimeter Setting Indicators and Wind Measuring Equipment. Equipment is used at airdromes in determining precise local weather conditions affecting flight operations.

OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

2-1 Line Item: 125

Nomenclature: Defense Support Program

Mission/Description: The Defense Support Program provides to the National Command Authorities. A secondary mission is to provide data on

(In Millions of Dollars)					
<u>Cost Data:</u>		<u>FY 1980</u>		<u>FY 1981</u>	
		<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
		-	24.0	-	67.2
				-	87.7

Basis for FY 1982 Request: Procurement of equipment to modify existing ground stations for compatibility with satellites containing enhanced capability; equipment to modify the Ground Communications Network to integrate the Simplified Processing Station and improve message survivability; and procurement of S-band Mobile Ground Terminals.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

Full Line Item: 426

Name as entered: SACDIN

Tasking Description: SACDIN will interface ADP communities as well as other communications systems to provide CINCUSAC with a single communications network. It will replace Satin I and the data transmission subsystem of the SAC Automated Command and Control System. SACDIN will provide secure communications service between CINCUSAC and the National Command Authorities Communications System.

Cost Data

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	-	25.5

Basis for FY 1982 Request: Procurement of low rate initial production hardware and long lead components.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 127

Nomenclature: Cheyenne Mountain Complex

Mission/Description: This program provides command, control and communications system in support of HQ NORAD. Computing and display equipment, located within the NORAD Cheyenne Mountain Complex, provide a focal point for all pre, trans, and post attack information necessary to direct the defense of the continent and to provide the NCA a basis for decision making.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	-	4.4

Basis for FY 1982 Request: Procurement of a data processing system for the Space Defense Operations Center to support the satellite survivability and anti-satellite missions. The hardware includes two medium and one large computer systems.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 128

Nomenclature: Spacetrack

Mission/Description: Spacetrack consists of radar and optical sensors which provides support to the Space Computation Center. The center takes data from assigned Aerospace Defense Command Sensors, contributing sensors/agencies and from scientific organizations for electronic processing.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt.	Qty	Amt	Qty	Amt
-	1.2	-	6.6	-	20.9

Basis for FY 1982 Request: To procure the fifth and final ground based electro-optical deep space surveillance (GEODSS) system and fund modifications to existing surveillance sensors which support the overall space defense mission of targeting, threat and damage assessment.



OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 131

Nomenclature: Minimally Attended Radar System (NAR)

Mission/Description: The NAR will upgrade the Alaskan Air Command sensor capability with modern search radars having a height finding capability that can provide search, height finding, beacon identification, strobe and other data for transmission to the region operations control center at Elmendorf AFB. It will be capable of operating unattended up to five days.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	-	46.2

Basis for FY 1982 Request: The present radars at 13 operational sites have been in use for 20 years. The time and manpower resources required to maintain and repair the outmoded equipment have become increasingly costly. Procurement of the minimally attended radar will significantly reduce life cycle costs and provide operational improvements.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 132

Nomenclature: Tactical SIGINT Support

Mission/Description: This program will provide improved communications between the SIGINT collection systems and Tactical Air Control Systems.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	1.2	-	9.7

Basis for FY 1982 Request: Procurement for replacement of outmoded communications equipments in support of the Air Force's emergency reaction special security communications system and wideband data link to provide communications linkage with elements of the remote tactical airborne SIGINT system.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 133

Nomenclature: Transportable Ground Intercept Facility (TGIF)

Mission/Description: The TGIF and related intelligence collection packages carried by the TR-1 or U-2R will be the principal air-born SIGINT collection and processing asset for Air Force tactical support. Coverage of certain essential SIGINT targets is now concentrated in exposed forward ground facilities

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	Qty	Qty	Qty
	Amt	Amt	Amt
	-	-	-
	35.9	15.0	33.9

Basis for FY 1982 Request: Procurement of the second full production model transportable ground intercept facility to process soviet pact tactical communications intercepted by COMINT pods carried on U-2R and TR-1 platforms orbiting central Europe.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 134

Nomenclature: Side Looking Airborne Radar (SLAk) Processing Equipment

Mission/Description: The SLAk UPD-4 system is the only reconnaissance system capable of detecting tactical size targets that are fixed/mobile/moving/emitting/non-emitting at large stand-off ranges. 12 UPD-4 systems are operational in Europe with one ground station at Zweibrücken AB, Germany.

Cost Data:

(In Millions of Dollars)

FY 1980 *		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	11.2	-	17.2	-	3.8

Basis for FY 1982 Request: Procurement of one additional correlator processor to support PACAF ground station.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 135

Nomenclature: TEREC Ground Processor

Mission/Description: The Tactical Electronic Reconnaissance (TEREC) system provides Tactical Commanders with a capability to rapidly establish and maintain a hostile electronic order of battle. TEREC, through a UHF/HF radio data link, provides data on location and operating characteristics of hostile emitters to ground based facilities for target selection, weapons selection, and employment tactics.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	4.9	-	6.3

Basis for FY 1982 Request: Procurement of 12 TEREC Remote Terminals and one downlink simulator for system checkout and training.

OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 137

Nomenclature: Imagery Trans

Mission/Description: An intra-theater imagery transmission system (IITS) transceiver converts reconnaissance imagery into a form appropriate for transmission and converts received imagery into a hard copy for commanders, mission planners and strike crews.

Cost Data:

(In Millions of Dollars)			
FY 1980		FY 1981	
Qty	Amt	Qty	Amt
-	-	-	-
			3.0

Basis for FY 1982 Request: Procurement of first 27 transceivers.

## OTHER PROCUREMENT, AIR FORCE

P-1 Line Item: 136

Nomenclature: Automatic Data Processing Equipment

Mission/Description: This program provides automatic data processing equipment necessary for the Air Force mission. Purchase candidates are identified through exhaustive and continuing economic analyses, based on the cost effectiveness of the purchase versus the lease alternative.

**Cost Data:**

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
-	-	21.6	-	22.9	-	37.4

basis for FY 1982 Request: Provides for purchase of installed computers, new acquisition and the purchase of peripheral equipment to support government-owned computer systems. Items are commercially available automatic data processing equipment from various manufacturers and third party vendors for various management and mission support applications.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 139

Nomenclature: World Wide Military Command & Control System (WWMCCS) ADPE

Mission/Description: The WWMCCS is the world-wide command and control system that provides the means for operational direction and technical administrative support involved in the command and control of the U.S. military forces. It supports the National Command Authorities, Joint Chiefs of Staff, Commanders of the unified and specified commands, and the military services and agencies through all levels of crisis and conflict.

Cost Data:

<u>(In Millions of Dollars)</u>					
<u>FY 1980</u>		<u>FY 1981</u>		<u>FY 1982</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
-	6.4	-	8.8	-	11.9

Basis for FY 1982 Request: Procurement of equipment to upgrade the WWMCCS system and provides for replacement of obsolescent equipment.



OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 141

Nomenclature: MAC Integrated Management System

Mission/Description: The Military Air Command Integrated Management System is to provide the CINCMAC, his staff operating headquarters, and operating locations with a highly responsive selectively integrated command control, and information management system to improve resource management.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	-	3.6

Basis for FY 1982 Request: Procurement of automated data processing equipment required to provide MAC with a standard worldwide automated transportation system, the consolidated aerial port subsystem.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 144

Nomenclature: Air Base Defense System

Mission/Description: This program provides for increased security protection of alert aircraft and special weapons storage areas through procurement and deployment of physical security sensor systems. Deployment of these sensor systems enhances security levels and results in an avoidance of personnel increases required to meet the increased terrorist threat. The systems consist of interior and exterior sensors, and sensor related equipment configured as closed systems to protect storage areas, alert aircraft parking areas, and individual aircraft shelters. Sensor activations are transmitted to a local control area and to remotely located displays.

Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	Qty	Qty	Qty
	Amt	Amt	Amt
	- 11.8	- 18.0	- 12.2

Basis for FY 1982 Request: Procurement of equipments to complement the basic intrusion detection system procured during the FY 75-81 program efforts; the Perimeter Surveillance System CCTV; the Sheltered Aircraft Sensor; the Radar Barrier Sensor; and equipment for protection of the Ground Launched Cruise Missile (GLCM) weapon storage areas.

OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 145

Nomenclature: Eastern Test Range

Mission/Description:

Eastern Test Range is an Air Force managed national range headquartered at Patrick AFB, Florida. Tracking and data collection stations extend from the Florida mainland into the Indian Ocean via instrumentation ships and five down range land stations.

Cost Data:

(In Millions of Dollars)

<u>FY 1980</u>		<u>FY 1981</u>	
<u>Qty</u>	<u>Am't</u>	<u>Qty</u>	<u>Am't</u>

Basis for FY 1982 Request: Procurement of equipments to support B-1 ballistic missile programs and land-based missions. Short range Army ordnance, meteorological probes, JCS special missions, and other special programs and equipment for land-based activities requiring use of the range and its organic resources.

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OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 147

Nonenclature: Range Improvement Equipment

Mission/Description: The operational range mission is to ensure combat readiness of aircrews through training, tactics development, and evaluation of existing and new capabilities in a realistic environment. This program provides instrumentation and equipment necessary to support the operational range mission. The primary function of this improved capability is to provide overall range control of forces, information for real time assessment of test and exercise objectives, conservation of resources through a more effective test, evaluation and training capability.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	20.7	-	25.7	-	23.3

Basis for FY 1982 Request: Procurement of equipments will continue Air Force operational improvements associated with mission control, range communications, and range instrumentation, such as, Display and Debriefing Systems, Laser Rangers, Television Ordnance Scoring Systems and a Surveillance Radar.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 148

Nomenclature: HF Radio Consolidation

Mission/Description: The HF radio consolidation program (Scope Signal III) is to satisfy a SAC requirement for a worldwide HF radio system responsive to SAC needs for extended command and control of its strategic forces. The SAC HF ground system installed in the late 50's is no longer functionally adequate to meet mission requirements.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	-	22.7

Basis for FY 1982 Request: Procurement of HF/single band radio equipment/antennas for Scope Signal III overseas locations at Elmendorf, Yokota, Clark, Thule, Croughton, and Incirlik. These stations, together with the CONUS stations will provide a worldwide communications system for command and control of SAC forces.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

2-1 Line Item: 131

Nomenclature: Space Shuttle

Mission/Description: This effort includes the procurement of hardware for the communications and navigational aids required to support Space Shuttle operations at Vandenberg AFB, Kennedy Space Center, and Johnson Space Center.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	25.8	-	17.4	-	6.7

Basis for FY 1982 request: Procurement of ground support system navigation aids communications and check out equipment to support the acquisition and activation of the space shuttle launch and landing capability at Vandenberg AFB, with a June 1984 initial operational capability.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 152

Nomenclature: Combat Supply System (CCS)

Mission/Description: The CCS minicomputer will be programmed to operate the minimum essential supply processes required to support combat forces deployed to austere forward locations. The CCS will be positioned at bases with a wartime deployment mission. In peacetime, it will be linked to the home base fixed supply computer as a low speed remote terminal and be used to manage and maintain war/contingency materiel requirements and resources for war/contingency operations. The system will deploy with the tactical unit.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	-	5.1

Basis for FY 1982 Request: Procurement of 46 small transportable computers for implementation of the USAF Combat Supply System.



OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 154

Nomenclature: Restricted Airspace Control

Mission/Description: This program is a joint Department of Defense (Tri-Service), Department of Transportation (FAA) project for upgrading radar and communications facilities used to provide command and control in the K-2508 restricted airspace. The primary objective is to establish a single facility to control the entire restricted airspace and to establish a management and control system to allow optional joint and shared use by military and civilian users. The primary DOD users are the Naval Weapons Center at China Lake, the Air Force Flight Test Center at Edwards AFB, the Army's Fort Irwin and the 35th Tactical Fighter Wing at George AFB.

Cost Data:

(In millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	4.5	-	4.4	-	7.1

Basis for FY 1982 Request: To provide the acquisition site preparation, installation and integration of the TPS-64 three dimensional long range radar to replace the FPS-20 radar at Laurel Mountain, a Radio Communications Switching System and equipment for the planned Automated Scheduling System.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 155

Nomenclature: Space and Missile Test Center/Western Test Range

Mission/Description: The Western Space and Missile Center (formerly West Test Range) is an Air Force managed national range headquartered at Vandenberg AFB, California. Launch pads and related support facilities are located at Vandenberg with telemetry, radar and optical tracking stations located on the California mainland, and stretching through the Pacific area. SAMTEC/WTR supports US space launches, ICBM testing and aircraft test flights.

Cost Data:

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
	-	4.7	-	4.7	-	4.3

Basis for FY 1982 Request: To provide funds for the improvement and modernization of Optical, Control and Telemetry Systems

OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 156

Nomenclature: Joint Tactical Information Distribution System

Mission/Description: To provide a time division multiple access, jam resistant, secure, digital information distribution system with a relative navigation and identification capability to operate/interconnect with the E-3A aircraft. It will enable a primary ground command link with such systems as 407L in combat situations utilizing tactical systems, facilities and elements. There are no viable alternatives to provide these capabilities within the Air Force.

Cost Data:

(In Millions of Dollars)						
	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
	-	-	-	-	-	27.3

Basis for FY 1982 Request: Procurement of eight Adaptable Surface Interface terminals.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 159

Nomenclature: Telephone Exchange

Mission/Description: This program replaces existing government owned central office telecommunications telephone systems with a standardized electronic telecommunication system telephone switch at Air Force installations. It also provides combat essential base users with a protected telephone capability in support of the USAF communications/air traffic control survivability program and the NATO long term defense program.

Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
	-	- 19.1	- 16.0

Basis for FY 1982 Request: Continuation of the telephone exchange system replacement program for Sembach AB, Eilson AFB, Wright-Patterson AFB (hospital), and the San Antonio metropolitan area telephone system.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 160

Nomenclature: Joint Tactical Communications Program (TRI-TAC)

Mission/Description: A joint service effort to develop and acquire tactical communications equipment which can be commonly used in combat. Tri-Tac equipment will provide a digital capability to allow total system security, and increased capacity to support the data and voice, point to point switching and transmission needs of deployed Tactical Air Forces worldwide.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	3.9	-	38.5	-	92.1

Basis for FY 1982 Request: Procurement of tropo scatter radios (AN/TRC-170) to provide a totally securable, wideband point to point transmission system on the tactical battlefield and circuit switches (AN/TTC-39) which will provide for a switched secure voice system for the tactical arena.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 161

Nomenclature: USKEDCOM

Mission/Description: This program acquires tactical communication-electronics equipment to support the U.S. Readiness Command; USAF and USA share equally in program acquisition costs.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	1.9	-	7.9	-	8.7

Basis for FY 1982 Request: Procurement of nodal/non-nodal SHF satellite terminals in support of a deployed rapid deployment joint task force headquarters.

OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 162

Nomenclature: Strategic SATCOM System (SSS)

Mission/Description: The SSS is a major evolutionary improvement to the Air Force Satellite Communications (AFSATCOM) system. The SSS will satisfy the urgent DOD requirement for survivable, highly jam resistant, two way and secure communications for command and control of the Single Integrated Operational Plan (SIOP) forces, other nuclear capable and supportive forces and selected high priority users.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	-	11.9

Basis for FY 1982 Request: Procurement of four network monitoring and control terminals, refurbishment of one developmental terminal and three Single Channel Transponder Injection Subsystem development modus. Also procures long lead components for the SSS Super high Frequency modification kits.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 165

Nomenclature: Teletypewriter Equipment

Mission/Description: This program will replace obsolete and unsupportable fixed plant and tactical teletypewriters with state-of-the-art equipment.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	3.2	-	7.1	-	7.9

Basis for FY 1982 Request: To exercise an option on a 1981 contract for additional fixed plant teletypewriters.



OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 166

Nomenclature: Ground Mobile Force Terminal

Mission/Description: This program will provide highly reliable communications among Air Force Component Headquarters at tactical air bases and elements of the Tactical Air Control System. It is phased to satisfy specific USAF communication needs and to be compatible with the Tri-Tac and Army (GME) efforts.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	15.8	-	27.8

Basis for FY 1982 Request: Procurement of AN/TSC-100A and AN/TSC-94A terminals.

CALIBER PROGRAMS, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 107

Commodification: wideband systems upgrade

Mission/Description: This program improves the reliability/maintainability/performance of selected Defense communications systems wideband transmission facilities. Improvements will provide digital equipment and enhance the quality of communications to support such systems as ALODIN, ACRS/VECON and command and control networks supporting GRIFFIN and specific command centers.

Cost Data:

(in millions of dollars)

FY 1980		FY 1981		FY 1982	
Qty	amt	Qty	amt	Qty	amt
-	9.0	-	12.0	-	14.0

Basis for FY 1982 Request: Procurement of equipment to upgrade wideband communication service through programs such as the ALODIN, ACRS/VECON, Backbone Upgrade and the NATO Long Term Defense Program Interconnect.

OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 173

Nomenclature: Training Support Equipment

Mission/Description: This program procures target radar, and early warning radar simulator systems for use on USAF operational test and training ranges, and SAC strategic training ranges to provide a realistic combat environment for aircrew training, and Congressional and DoD directed operational test and evaluation of weapons systems.

<u>Cost Data:</u>			
<u>(In Millions of Dollars)</u>			
	<u>FY 1980</u>		
	<u>Qty</u>	<u>Amt</u>	
	-	21.5	
	<u>FY 1981</u>		
	<u>Qty</u>	<u>Amt</u>	
	-	3.4	

Basis for FY 1982 Request: Procurement of AN/MPQ-15 AAA emitter; AN/MSR-11 receivers; AN/MLQ-14; AN/MLQ-15 ground jammers; and a tactical/strategic command and control system; and an AN/SPS-1YY system.

OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 174

Nomenclature: Plan Position Indicator Scope

Mission/Description: The plan position indicator is a solid state, digitally implemented cathode ray tube which can display radar, beacon, mapping, and other video symbology. It is used in numerous applications for surveillance, identification, intercept control, and traffic control.

Cost Data:

• (In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	-	6.1

Basis for FY 1982 Request: Procurement of AN/UPA-62 PPI equipment to replace the AN/UPA-35/48 scopes which are deteriorating and costly to maintain.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 176

Nomenclature: Tactical C-E Equipment

Mission/Description: The program provides essential communications equipment to satisfy .3 systems requirements to support the tactical air control system and associated combat communications elements.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
-	-	-	1.1	-	13.6

Basis for FY 1982 Request: Procurement of AN/GRC-206 Communications Centrals, AN/PRC-113 backpack UHF/VHF-AM radios, and AN/TRC-176 UHF radio systems to support forward air controller and combat control teams.

OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 178

Nomenclature: Radio Equipment

Mission/Description: This program will replace outdated and nearly obsolete inventory for which many manufacturers will no longer supply spare parts. Much of the equipment in use is more than 20 years old.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	3.8	-	11.7

Basis for FY 1982 Request: Provide funds to upgrade the HF Cemetery Network by acquiring and installing new radio voice and tele-type systems. It also will initiate a multiyear effort to replace obsolete HF radio equipment.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 181

Nomenclature: Communications-Electronics Class IV Modifications

Mission/Description: Class IV modifications are defined as: a. Safety Modifications required to correct a condition to insure safety of personnel, systems, and/or equipment by eliminating operational or physical hazards. b. Mission Essential Modifications required to correct deficiencies in systems and equipment that affects reliability and maintainability to the extent that the mission is seriously impeded. c. Logistics Modifications which extends the service life by modification to present equipment in lieu of buying new equipment at a much greater cost.

Cost Data:

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
	-	12.6	-	16.3	-	22.5

Basis for FY 1982 Request: To provide funds for modifications to in-service systems and equipment.

OTHER PROCUREMENT, AIR FORCE

ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 182

Nomenclature: Traffic Control & Landing System (TRACALS) Modifications

Mission/Description: This program provides modifications to ground facilities and equipment (fixed and mobile) necessary to provide safe, orderly, and expeditious world-wide USAF aircraft movements. Included are systems necessary for the DOD mission but not provided by FAA in major functional areas: enroute and terminal navigation, approach and landing, air traffic control communications, and necessary interfaces with other systems (both National and International).

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	7.3	-	5.2	-	4.3

Basis for FY 1982 Request: Procurement of equipment to correct deficiencies on the AN/TPN-19 Landing Control Central and the Tactical Loran-C/D ground chain.



OTHER PROCUREMENT, AIR FORCE  
ELECTRONIC & TELECOMMUNICATIONS DATA SHEET

P-1 Line Item: 184

Nomenclature: Ballistic Missile Early Warning System (BMEWS)

Mission/Description: The BMEWS provides detection and warning of a mass ICBM and/or SLBM raid launched over the Northern, Pacific, Atlantic and Polar regions to impact on the North American Continent, and of a mass ICBM raid against the United Kingdom. A secondary role is to provide Satellite detection and tracking data to the SPACETRACK system.

(In Millions of Dollars)					
<u>Cost Data:</u>		FY 1980		FY 1981	
		<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
		-	1.5	-	45.0
				-	8.5

Basis for FY 1982 Request: Procures peculiar support equipment and data for the upgrade of the detection radar at Thule, Greenland and radome replacements at other sites.

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 186

Nomenclature: base/ALC Calibration Package

Mission/Description: The base/ALC metrology and Calibration (METCAL) equipment program provides calibration standards grouped in a series of generic measurement packages or consoles, (Time and Low Frequency, Radio and Microwave Frequency, Temperature-Length-Volume-Vibration, Mass-Pressure-Flow-Acoustics-Optics-Luminous Intensity) to all major Air Force activities having a Base Precision Measurement Equipment Laboratory (BPMEEL). There are 116 BPMEELs.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
--	3.7	--	4.5	--	4.6

Basis for FY 1982 Request: To provide equipment to enable each major Air Force activity to attain standardized measurement and optimum self-sufficiency in the calibration and maintenance of critical precision measurement equipment (PME) required for daily base operational capability. Precise measurement is required to maintain the intra and interoperability of aircraft and ground weapon systems.

OTHER PROCUREMENT, AIR FORCE  
Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 169

Nomenclature: Signal Generator 0.5 to 512 MHz

Mission/Description: This is a general purpose commercial multi-application VHF-UHF radio frequency signal generator which produces modulated or unmodulated signals in frequency range of 0.5 to 512 MHz. It is used to test and align airborne and ground radio receivers and associated electronic equipment.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
700	4.4	700	4.6	700	6.1

basis for FY 1982 request: Provides current state of the art signal generators to replace obsolete and unrepairable signal generators now in the inventory and to keep pace with modern technology.

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 200

Nomenclature: Laser Acquisition Device (LAD)

Mission/Description: This device attaches to the aircrew members helmet and is target acquisition aid. it senses laser energy from a designated target and directs head motion until the designated target is within the aiming reticle. This reduces target acquisition time in the target area, promotes accuracy and minimizes danger due to loitering.

Cost Data:

•(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	178	6.9	350	6.6

Basis for FY 1982 Request: The FY 1982 request provides for procurement of an additional 350 units against an established requirement of 1050 units.

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 201

Nomenclature: Chemical and Biological Defense Program

Mission/Description: This program is for procurement of chemical and biological defense equipment to enhance survivability and enable AF units to conduct operations in a chemical warfare environment.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	11.3	-	16.6

basis for FY 1982 Request: Provides funding for procurement of an aircrew eye-respirator system. This is a new respirator/blower system which provides filtered air, valsalva capability, and relieves the performance degradation imposed on aircrew members by the presently used equipment.

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 203

Nomenclature: base Mechanization Equipment

Mission/Description: The Air Force requires adequately equipped facilities in which to maintain and store weapon systems/supplies efficiently and productively. Modern equipment is needed to achieve this objective. The use of mechanized equipment eliminates multiple handling of materials and provides: responsiveness to maximum flexibility at minimum investment cost; simplification of parts inventory and maintenance tasks and safe and efficient operations.

Cost Data:

(In Millions of Dollars)

	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
	- 11.9	- 13.4	- 13.7

Basis for FY 1982 request: The FY 1982 program includes sixteen projects at four of our five depots to support, supply, and maintain facilities and eight projects at air bases to improve handling and storage of supplies. All projects are based on the need and are supported by formal economic analysis and industrial engineering studies which indicate a substantial costs saving and/or valid need.

OTHER PROCUREMENT, AIR FORCE  
Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 206

Nomenclature: Generators, 200Kw

Mission/Description: This generator provides mobile power for all applications where utility 150KW to 200KW, 50/60HZ power is required, such as hanger and ramps, tropospheric scatter radar, microwave communications agreement, test range support, runway lights, ground control approach and landing systems and control towers and field hospitals. The generator is one of the DoD standard generators developed under the DoD Mobile Electronic Power project.

Cost Data:

(In Millions of Dollars)					
FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	138	4.4

Basis for FY 1982 Request: The request will provide funding for replacement of the old generators, which must be replaced because of excessive repair costs and the inability of industry to provide repair parts economically.

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 209

Nomenclature: Power Plant A/E 24 T-8

Mission/Description: This is a light weight and air transportable power plant consisting of two 60/120 KW gas turbine generator sets mounted on a pallet which includes a distribution panel, fuel system and cable storage. The units are designed for mobility and are essential for the operation of electronic equipment in deployed locations.

Cost Data:

(In Millions of Dollars)

<u>FY 1980</u>		<u>FY 1981</u>		<u>FY 1982</u>	
<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>	<u>Qty</u>	<u>Amt</u>
-	-	18	4.0	17	4.2

Basis for FY 1982 Request: Provides power units for communications and electronic equipment used by tactical air control systems of the regular forces and the Air National Guard.



## Other Base Maintenance &amp; Support Equipment Data Sheet

P-1 Line Item: 211

**Nomenclature: Base Procured Equipment**

**Mission/Description:** bases and units throughout the Air Force require and are authorized equipment that must be acquired directly from GSA, DLA, one of the other services, or from commercial concerns. The program provides funds for local procurement of this equipment, costing \$3,000 or more each, which is not centrally procured and managed by the Air Force.

## Cost Data:

(In Millions of Dollars)

	FY 1980	FY 1981	FY 1982
	<u>Qty</u>	<u>Qty</u>	<u>Qty</u>
	<u>Amt</u>	<u>Amt</u>	<u>Amt</u>
-	26.2	-	27.7

Basis for FY 1982 Request: The request provides for procurement of authorized equipment to support day to day operation of 134 air bases/major installations and 2554 smaller installations. It also provides a minimum acceptable work and living environment for military and civilian members of the Air Force. It also includes field type equipment such as that used by the US Army to support deployed units in the field.

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 212

Nomenclature: Medical and Dental Equipment

Mission/Description: This program provides medical and dental equipment for the Air Force Medical Service in support of a world-wide comprehensive health care system. It supports hospitals, clinics, a global aeromedical evacuation system, physiological training units, and specialized medical and dental training facilities and laboratories.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	22.2	-	31.0	-	38.7

Basis for FY 1982 Request: It provides for replacement of equipment worn beyond economical repair; modernization of obsolete equipment; real property installed equipment for health care facilities and procurement of war readiness equipment.

## OTHER PROCUREMENT AIR FORCE

P-1 Line Item: 21

Nomenclature: barr., Aircraft Arresting System

**Mission/Description:** Arresting systems are used to engage and safely stop aircraft during landing and take-off when aircraft damage or malfunction prevents normal acceleration and/or braking. It consists of an energy absorber or braking system attached to cables laying across the runway to engage an aircraft as it rolls over the cables when the system is engaged during emergencies.

Cost Data:

(In Millions of Dollars)

	FY 1980		FY 1981		FY 1982	
	Qty	Amt	Qty	Amt	Qty	Amt
1	16	1.5	18	2.3	30	4.4

plans for FY 1962 request: It provides funding for two types of barriers, the BAK-12 and the BAK-14. The BAK-12 provides an above ground cable for arresting aircraft equipped with tail hooks. The BAK-14 permits the cable to be placed in a trench covered with metal plates over which a non-engaging aircraft may roll freely. It is raised to operating position during emergencies.

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 216

Nomenclature: Central Aircraft Support System (CASS)

Mission/Description: The system is used by 1-38 aircraft on the ground. It supplies low pressure, high volume air for aircraft starting; utility air for hand-operated, air driven tools, 115 VAC, 400 HZ electrical power for use with aircraft electrical systems and test equipment; 60 HZ power for electrically operated hand tools and test equipment. The major equipment components of CASS are centrally located with Air and electrical power distributed through underground manifolds to stations located on the aircraft ramp.

Cost Data:

(in Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	1.7	-	3.1

Basis for FY 1982 Request: A test implemented in May 1978 showed a CASS life cycle (25 years) cost savings of nearly \$76 million versus standard support equipment at six AFB bases. The FY 82 request will provide funding for systems at William AFB, Arizona; Columbus AFB, Mississippi; Vance AFB, Oklahoma; and Sheppard AFB, Texas.

OTHER PROCUREMENT, AIR FORCE  
Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 217

Nomenclature: Pallet, Air Cargo, 100" x 86"

Mission/Description: The MCU-6/E air cargo pallet is constructed on an aluminum rail (frame) with aluminum skins thermally bonded to a balsa wood core. This pallet is designed for operation in the 463L cargo handling system which matches specialized material handling equipment to the internal aircraft cargo system of the C-5, C-141, C-130, KC-10 and C-17 aircraft. They provide a means to expedite cargo handling and rapid turnaround of aircraft in both peace and war environments.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
20,000	16.6	12,000	10.3	12,000	10.3

Basis for FY 1982 Request: 12,000 pallets are required to replace condemnations and losses and to build toward an inventory objective sufficient to fully support the airlift requirement in war.

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 224

Nomenclature: Productivity Enhancement

Mission/Description: This program will provide funds for the Fast-Payback Capital Investment Program, a program to enhance productivity and reduce operating costs. Equipment purchased is identified by organizations throughout the Air Force with the commensurate savings and amortization data specifically identified. Amortization must be achieved quickly and items procured must be commercially available so they may be put into use in the minimum time.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	3.8	-	4.5	-	10.0

Basis for FY 1982 request: Provides funds to support four specific projects which are based on increasing productivity and reducing operating costs and provides additional funding to support additional projects as they develop thus promoting savings which cannot be captured in normal budget processes.

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 226

Nomenclature: RDF Mobility Equipment

Mission/Description: Provides the first increment of equipment needed to support employment of the rapid deployment force (RDF) in Southwest Asia. This equipment augments existing inventories to support one-half of the RDF at the six location beddowns required by RUJTF.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	-	12.4

Basis for FY 1982 Request: Provides funding for procurement of general purpose and expandable maintenance shelters, water purification sets, refrigerators, and laundry equipment. These are needed to offset the lack of available host nation maintenance facilities at beddown bases in deployed location and to support basic human needs.

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 230

Nomenclature: Scientific/Technical Intelligence

Mission/Description: This program provides data reduction, photo processing, and printing equipment for the Foreign Technology Division (FTD). FTD also supports Air Force and DOD inputs to the National Intelligence Estimates (NIEs), maintains the DOD scientific and Technical (S&T) intelligence reference library, and acts as DOD executive agent for radar and infrared intelligence data processing.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	3.1	-	3.1

Basis for FY 1982 Request: To provide improved data analysis and production capabilities, replace old and obsolescent equipment, and acquire the test and calibration instruments necessary to operate and maintain existing systems.



OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 232

Nomenclature: Air Force Technical Application Center\*

Mission/Description: This program supports the Atomic Energy Detection System operated by the Air Force Technical Application Center. It provides the primary national technical means for verifying compliance of signatory states with terms of the Limited Test Ban Treaty, Threshold Test Treaty, Peaceful Nuclear Explosion Treaty and the Comprehensive Test Ban Treaty currently under negotiation.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	8.3	-	5.4	-	11.8

Basis for FY 1982 Request: Provides a variety of equipment required for seismic,

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 233

Nomenclature: Photo Processing/Interpretation System

Mission/Description: Tactical forces require mobile photo reconnaissance processing facilities that can effectively deploy in support of tactical reconnaissance operations to accomplish original film processing, duplication/reproduction and production dissemination.

Cost Data:

(in millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	-	-	-	-	5.8

Basis for FY 1982 Request: The WS-430b Photo Processing and Interpretation System was originally developed in 1965 to meet Vietnam requirements. It was procured in 1967 and estimated to have five year system life. There are longstanding deficiencies associated with the existing WS-430b which have prompted the JAF to waive mobility requirements during operational readiness inspection (OKI) to try to extend system's life. Deficiencies include: (1) large water consumption; (2) inadequate printing capability; (3) lack of production control/management facilities; (4) no control over large volume of chemical effluents; (5) major shelter corrosion problems; (6) extremely poor work environment.

The WS-430b enhancement program will reduce/eliminate major deficiencies in the existing system for the active force and Air National Guard (ANG) Tactical Reconnaissance Squadrons (TRS). Shelters will be refurbished, wet film processing rate will be doubled with reduced water requirement, wet duplication will be replaced with dry silver processing and pollutant discharge will be reduced. In addition ANG facilities will be equipped with a Report Entry/Edit station to speed up photo exploitation and product distribution.

OTHER PROCUREMENT, AIR FORCE

Other Base Maintenance & Support Equipment Data Sheet

P-1 Line Item: 237

Nomenclature: Industrial Preparedness

Mission/Description: This program provides the resources required for all plans, actions, or measures necessary to establish or maintain an industrial base, both government-owned and privately-owned to support current, wartime or other contingency military requirements. It includes industrial preparedness planning, modernization and maintenance on government-owned production facilities, and a manufacturing technology program which is designed to improve productivity and lower costs.

Cost Data:

(In Millions of Dollars)

FY 1980		FY 1981		FY 1982	
Qty	Amt	Qty	Amt	Qty	Amt
-	2.2	-	10.4	-	10.5

Basis for FY 1982 Request: The request represents a continuing effort to support industrial preparedness objectives primarily for the Electromagnetic Window/Electronics focal area and the Munitions focal area of the Manufacturing Technology Program. Emphasis is on the expendable portion of munitions and ground based sensing and electronic sub-systems in support of tactical, strategic and space systems.

**DATE**  
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